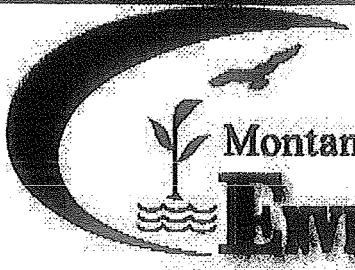


AGENCY USE ONLY				
PERMIT NO.:	Date Rec'd.:	Amount Rec'd.:	Check No.:	Rec'd By:
MT 6010151	12/27/13	\$		DJ



## Montana Department of ENVIRONMENTAL QUALITY

### WATER PROTECTION BUREAU

FORM NOI	<b>Notice of Intent (NOI) for Montana Pollution Discharge Elimination System Application for New and Existing Concentrated Animal Feeding Operations</b>
-------------	--

The Application form is to be completed by the owner or operator of a Concentrated Animal Feeding Operation (CAFO) or Aquatic Animal Production Facility. Please read the attached instructions before completing this form. You must print or type legibly; forms that are not legible or are not complete will be returned. You must maintain a copy of the completed application form for your records.

**Section A - Application Status (Check one):**

☐ New  
☐ Resubmitted  
☒ Renewal  
☐ Modification

No prior application submitted for this site.  
 Permit Number: MTG \_\_\_\_\_  
 Permit Number: MTG 010151  
 Permit Number: MTG \_\_\_\_\_

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 DEQ/WPB  
 PERMITTING & COMPLIANCE DIV.

**Section B - Facility or Site Information (See instruction sheet.):**

Site Name MONTANA CORRECTIONAL ENTERPRISE

Site Location 350 COWLEY LAKE RD

Nearest City or Town Deer Lodge County Powell

Latitude 46°29'07" Longitude 112°82'44"

Date Facility began operation? \_\_\_\_\_

Is this facility or site located on Indian Lands? ☐ Yes ☒ No

**Section C - Applicant (Owner/Operator) Information:**

Owner or Operator Name David W. Miller

Mailing Address 250 COWLEY LAKE RD.

City, State, and Zip Code Deer Lodge Mt. 59722

Phone Number 406-846-1920 ext 2294

Is the person listed above the owner? ☐ Yes ☒ No

Status of Applicant (Check one) ☐ Federal ☒ State ☐ Private ☐ Public ☐ Other (specify) \_\_\_\_\_

**Section D - Existing or Pending Permits, Certifications, or Approvals:** ☒ None

☐ MPDES \_\_\_\_\_ ☐ RCRA \_\_\_\_\_  
☐ PSD (Air Emissions) \_\_\_\_\_ ☐ Other \_\_\_\_\_  
☐ 404 Permit (dredge & fill) \_\_\_\_\_ ☐ Other \_\_\_\_\_

**Section E - Standard Industrial Classification (SIC) Codes:**

Provide at least one SIC code which best reflects the activity of project described in Section H.

Code	A. Primary	Code	B. Second
1	241	2	211
Code	C. Third	Code	D. Fourth
3		3	

**Section F - Facility or Site Contact Person/Position:**Name and Title, or Position Title David W. Miller Dairy ManagerMailing Address 350 COWLEY LAKE Rd.City, State, and Zip Code Deer Lodge MT. 59722Phone Number 406-560-0443**Section G - Receiving Surface Waters(s):**

Outfall/Discharge Locations: For each outfall, List latitude and longitude to the nearest second and the name of the receiving waters

Outfall Number	Latitude	Longitude	Receiving Surface Waters
Lower Fe. 001	N 46° 23.388'	W 112° 47.894'	TIN CUP JOE Creek
Upper 002 Fe. 8/01	N 46° 22.482'	W 112° 47.723'	TIN CUP JOE Creek
Dairy 003	N 46° 23.280'	W 112° 48.680'	TIN CUP JOE Creek
Dairy 004	N 46° 23.200'	W 112° 48.507'	TIN CUP JOE Creek
005			

Map: Attach a topographic map extending one mile beyond the property boundaries or the site activity identified in Section B depicting the facility or activity boundaries, major drainage patterns, and the receiving surface waters, stated above. Also identify the specific location of the production area, and land application area(s).

Is the receiving water on the 303(d) list for nutrients (nitrogen and/or phosphorus) ☐ Yes ☒ No

## Section H – Concentration Animal Feeding Operation Characteristics

### Waste Production, Storage and Disposal

	Animal type	Number in Open Confinement	Number Housed Under Roof
<input checked="" type="checkbox"/>	Mature Dairy Cows	325	0
<input checked="" type="checkbox"/>	Dairy Heifers	120	0
<input type="checkbox"/>	Veal Calves		
<input checked="" type="checkbox"/>	Cattle (not dairy or veal)	306	0
<input type="checkbox"/>	Swine (55 lbs or over)		
<input type="checkbox"/>	Swine (55 lbs or under)		
<input type="checkbox"/>	Horses		
<input type="checkbox"/>	Sheep or Lambs		
<input type="checkbox"/>	Turkeys		
<input type="checkbox"/>	Chickens (broilers)		
<input type="checkbox"/>	Chickens (layers)		
<input type="checkbox"/>	Ducks		
<input type="checkbox"/>	Other (Specify: _____)		
<input type="checkbox"/>	Other (Specify: _____)		
<input type="checkbox"/>	Other (Specify: _____)		

### Manure, Litter and/or Wastewater Production and Use.

How much manure, litter, and process wastewater is generated annually by the facility?

Solid (tons): 10,840 Liquid/Slurry (gallons): 6.5 million

If land applied, how many acres of land under control of the permit applicant are available to apply the manure, litter, or process wastewater generated from the facility? (Note: Do not include setback distances in available acreage)

40,000 Acres

How much manure, litter, and process wastewater is transferred to other persons per year? (estimated) Solid

(tons): 0 Liquid/Slurry (gallons): 0

Were the containment structures built after February 2006? NO

- ☐ Do the waste containment structures have 10 feet of separation between the pond bottom and any bedrock formations?
- ☐ Do the waste containment structures have 4 feet of separation from the pond bottom and any ground water?
- ☐ Were any of the waste containment structures built within 500 feet of any existing well?

Type of Containment/Storage	Total Capacity	Units (gallons or tons)	Days of Storage
<input type="checkbox"/> Anaerobic Lagoon		1,000,000	290 +
<input type="checkbox"/> Storage Pond #1			
<input type="checkbox"/> Storage Pond #2			
<input type="checkbox"/> Storage Pond #3			
<input type="checkbox"/> Storage Pond #4			
<input type="checkbox"/> Storage Pond #5			
<input type="checkbox"/> Above Ground Storage Tank			
<input type="checkbox"/> Below Ground Storage Tank #1			
<input type="checkbox"/> Below Ground Storage Tank #2			
<input type="checkbox"/> Underfloor Pits	57,600		90 +
<input type="checkbox"/> Roofed Storage Shed			
<input type="checkbox"/> Concrete Pad			
<input type="checkbox"/> Impervious Soil Pad	2,000 tons		90 +
<input type="checkbox"/> Other (Specify: )			
<input type="checkbox"/> Other (Specify: )			

per DJ  
completing  
Regard  
2003

### Physical Data for CAFO

#### Nutrient Management Plan

All Concentrated Animal Feeding Operations seeking permit coverage after July 31, 2007 are required to complete and implement a Nutrient Management (NMP). The NMP must be submitted to the Department using the form provided by the Department (Form NMP). Check the box below that applies and provide the required information. The NMP must be developed in accordance with ARM 17.30.1334 and implemented upon the effective date of permit coverage. (Check One)

☒ Does the facility have an NMP?

Date NMP was developed: 1990's

Date NMP was last modified: 2012

☐ NMP has not been prepared; provide detailed explanation below

### Section I - Supplemental Information

See Attached - Info.

Attach A - Map

Attach B - Manure Storage

Attach C - Land Use Plan

Attach E - Topo Maps + Application Areas

Attach D - Application Schedule



## Section J - CERTIFICATION

### Permittee Information:

This Form NMP must be completed, signed, and certified as follows:

- For a corporation, by a principal officer of at least the level of vice president;
- For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
- For a municipality, state, federal, or other public facility, by either a principal executive officer or ranking elected official.

### All Permittees Must Complete the Following Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information; including the possibility of fine and imprisonment for knowing violations. [75-5-633, MCA]

A. Name (Type or Print)

David G. Miller

B. Title (Type or Print)

Deputy Manager Montana Correctional Enterprise

C. Phone No.

406-560-0443

D. Signature



E. Date Signed

10-31-13

The Department will not process this form until all of the requested information is supplied, and the appropriate fees are paid. Return this form (NOI) and the applicable fee to:

Department of Environmental Quality  
Water Protection Bureau  
PO Box 200901  
Helena, MT 59620-0901  
(406) 444-3080

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DEC 23 2013

DEQ/WPB  
PERMITTING & COMPLIANCE DIV.

# Form NOI – Application for New and Existing Concentrated Animal Feeding Operations and Aquatic Animal Production Facilities

**Important:** Do not use this form to transfer permit coverage to a new owner or operator, you must use Form PTN. You must provide the information requested for this application to be complete. Responses must be self-explanatory and must not refer exclusively to attached maps, plans or documents. The appropriate fees must accompany this Form NOI. Mail this to the DEQ address stated on the form. You must maintain a copy of the completed form for your records. CAFO General Permit and the Fish Farm General Permit documents and related forms are available at (406) 444-3080 or on the DEQ website at: <http://www.deq.mt.gov>.

Please type or print legibly; applications that are not legible or are not complete will be rejected.

## SPECIFIC ITEM INSTRUCTIONS

### ***Section A – Application Status***

Check the box that applies and provide the requested information. If Form NOI has not been previously submitted for this site, check the first box (New). DEQ will assign a permit number when the form is submitted. The permit number is a 9-digit code beginning with MTG010. If you submitted a Form NOI and DEQ deemed the application deficient or incomplete, check the second box (Resubmitted); If you were notified by DEQ that the permit coverage expired or will expire and you are now submitting an NOI to continue coverage check the third box (Renewal); if there is a change in the facility information (Section H or Section I), check the last box (Modification). If a NOI has been submitted and deemed deficient then the permit number will appear in the deficiency letter. If the site is covered under the *General Permit for Concentrated Animal Feeding Operations* or the *General Permit for Fish farms*, the number is given on the Authorization letter sent to you by DEQ. The permit number must be included on any correspondence with DEQ regarding this site.

### ***Section B – Facility Information:***

Identify the legal name of the facility that is subject to permit coverage. The facility is the land or property where the facility or activity is physically located or conducted, including adjacent land used in connection with the facility or activity. Give the address or location of this facility and the geographical information. The location may be the physical mailing address or description of how the facility may be accessed. (PO Boxes are not acceptable.) Latitude and longitude must be accurate to the nearest second. Sources include GPS, a USGS topographic map, and/or "Topofinder" from <http://nris.mt.gov/interactive.asp>.

### ***Section C – Applicant (Owner/Operator) Information:***

Give the name, as it is legally referred to, of the person, business, public organization, or other entity that owns, operates, controls or supervises the facility described in Section B of this Form. The operator is the legal entity which controls the facility operation. The permit will be issued to the entity identified in this section (Section C). The owner or operator assumes all liability for discharges of the facility and compliance with the permit. If the owner or operator is other than a person or government entity it must be registered with the Montana Secretary of State's office.

### ***Section D – Existing or Pending Permits, Certification, or Approvals:***

List, in descending order of significance, the four digit standard industrial codes that best describe the activities at this facility. Also, provide a brief description in the space provided. A complete list of SIC Codes (and conversion form the newer North American Industry Classification System (NAICS)) can be obtained from the Internet at <http://www.census.gov/epcd/www/naics.html> or in paper from the document entitled "Standard Industrial Classification Manual", Office Management and Budget, 1987. SIC Code listings may also be found at <http://www.osha.gov/pls/imis/sicsearch.html>. At least one SIC code must be provided. See attached table for common SIC codes.

### ***Section F – Facility Contact Person/Position:***

Give the name, title, and work phone number of a person who is thoroughly familiar with the operation of the facility and the facts reported in this form, and who can be contacted by DEQ for additional information. Those facilities with periodic changes in the contact person may provide the contact person's position instead of a person's name.

### ***Section G – Receiving Surface Water(s):***

An outfall location is considered to be a discrete channel, conveyance, structure, or flow path from which the discharge leaves the boundary of the facility and/or enters surface water. “Surface waters” is defined in ARM 17.30.1102(32) as any waters on the earth’s surface including, but not limited to, streams, lakes, ponds, reservoir, or other surface water including ephemeral and intermittent drainage ways and irrigation systems. Water bodies used solely for treating, transporting, or impounding pollutants shall not be considered surface water. Provide the following information in the table on the application form:

1. Assign a number to each outfall starting with 001. If the outfall is not well defined, assign the outfall number to the drainage area. For existing permittees, ensure outfall numbers used are consistent with those identified in the past for the same outfall.
2. Latitude/longitude can be derived from USGS 7.5 minute topographic map and/or “Topofinder” at <http://nris.mt.gov/interactive.html> . Latitude and longitude must be accurate to the nearest second.
3. Give the name of the surface waters that receive the discharge. If the discharge reports to a municipal storm sewer, please indicate so.
4. Please attach a USGS topographic map(s) indicating the boundary of your facility, major drainage patterns, and the receiving surface water(s).

The facility must check the CWAIC data base at <http://cwaic.mt.gov/> to determine if the receiving water is impaired for nutrient (nitrate and/or phosphorus).

### ***Section H – Concentrate Animal Feeding Operation Characteristics:***

#### **Waste Production, Storage and Disposal:**

Report the maximum number of each type of animal confined at any one time and the type of confinement structure used for each (e.g. open feedlot, under roof.)

#### **Manure, Litter, and/or Wastewater Production and Use:**

To *transfer waste* means to give away or sell waste to another person for disposal on land owned or controlled by someone other than the permit applicant.

The term “*storage pond*,” includes, but is not limited to ponds, aerobic lagoons, evaporation ponds, manure holding cells, collection basins, settling basins, bermed or diked areas used for impounding waste, and temporary or seasonal waste holding ponds.

“*Production area*” means that part of an Animal Feeding Operation (AFO) that includes the animal confinement area, the manure storage area, the raw materials storage area, and the waste containment areas. The *animal confinement area* includes but is not limited to open lots, housed lots, feedlots, confinement houses, stall barns, free stall barns, milk rooms, milking centers, cow yards, barnyards, medication pens, walkers, animal walkways, and stables. The *manure storage area* includes but is not limited to lagoons, runoff ponds, storage sheds, stockpiles, under house or pit storage, liquid impoundments, static piles, and composting piles. The *raw materials storage area* includes but is not limited to feed silos, silage bunkers, and bedding materials. The *waste containment area* includes but not limited to settling basins, and areas within berms and diversion which separate uncontaminated storm water. Also include in the definition of production area is any egg washing or egg processing facility, and any area used in storage, handling, treatment, or disposal of mortalities.

“*Land application area*” means land under control of AFO owner or operator, whether it is owned, rented, or leased, to which manure, litter or process wastewater from the production area is or may be applied.

### ***Section I – Supplemental Information:***

Use the space provided to expand upon any information requested in the application or information you wish to bring to the attention of the reviewer. Attach additional sheets, if necessary. For applicants requesting a modification to an existing authorization or site-specific Nutrient Management Plan (aka Form NMP), provide an explanation of the requested modification.

# Common Standard Industrial Classification (SIC) Codes

Division	SIC	Industrial Activity Represented
Agriculture, Forestry and Fishing	211	Beef Cattle Feedlots
	212	Beef Cattle, Except Feedlots
	213	Hogs
	214	Sheep and Goats
	241	Dairy Farms
	251	Broiler, Fryer and Roaster Chickens
	252	Chicken Eggs
	253	Turkeys and Turkey Eggs
	254	Poultry hatcheries
	259	Poultry and Eggs, not elsewhere classified (Ducks)
	272	Horses and other Equines
	921	Fish Hatcheries and Preserves
Mining	1021	Copper Ores
	1031	Lead and Zinc
	1044	Silver Ores
	1041	Gold Ores
	1221	Bituminous Coal and Lignite Surface Mining
	1311	Crud Petroleum and Natural Gas
	1442	Construction Sand and Gravel
Construction	1521	General Contractor - Single Family Houses
	1522	General Contractor - Residential Bldgs. Other Than Single Family
	1542	General Contractor - Nonresidential Buildings, Other than Industrial Buildings and Warehouses
	1611	Highway and Street Construction, Except Elevated Highways
	1622	Bridge, Tunnel, and Elevated Highway construction
	1623	Water, Sewer, Pipeline, communications & Power Line Construction
	1629	Heavy construction, Not Elsewhere Classified
	1794	Excavation Work
Manufacturing	7349	Building Cleaning and Maintenance Services, Not Elsewhere
	2011	Meat Packing Plants
	2063	Beet Sugar
	2421	Sawmills and Planing Mills, General
	2611	Pulp Mills
	2911	Petroleum Refining
	3241	Cement, Hydraulic
Transportation, Communications, Electric, Gas and Sanitary Services	4911	Electric Services
	4941	Water Supply
	4952	Sewerage Systems
	4953	Refuse Systems
Wholesale Trade	5093	Scrap and Waste Materials
	5154	Livestock
	5171	Petroleum Bulk Stations and Terminals
Retail Trade	5541	Gasoline Service Station
	5984	Liquefied Petroleum Gas (Bottled Gas) Dealers
Services	7011	Hotels and Motels
	7033	Recreational Vehicle Parks and Campsites
	7542	Carwashes
Public Administration	9224	Fire Protection
	9711	National Security

*Attachment*  
*[Signature]*

303 Irene Street  
Helena, Montana 59601  
P.O. Box 4699  
Helena, Montana 59604

(406)443-5210  
Fax: (406)449-3729

May 13, 2005

Mr. Bill Dabney  
Montana Correctional Enterprises  
350 Conley Lake Road  
Deer Lodge, MT 597822

**RECEIVED**

DEC 23 2013

DEQ/WPB  
PERMITTING & COMPLIANCE DIV.

Subject: Runoff Volume for 25-Year, 24-Hour Precipitation Event

Dear Bill:

As requested, we have estimated the volume of runoff that might be expected from the 25-year, 24-hour precipitation event at three sites including the upper feedlot, lower feedlot and dairy. We understand that the volumes we have calculated will be used by you to design and build detention ponds so that these facilities contain all runoff from the 25-year, 24-hour precipitation event.

We have relied on the following data sources in our analysis:

- Precipitation maps published by the National Weather Service (NWS 1973)
- Soil Survey of the area published by the Natural Resources Conservation Service (NRCS 2003)
- Aerial photographs of the area with contributing areas sketched by us and confirmed by you. Figures 1, 2 and 3 show these photos for the lower feedlot, upper feedlot and dairy areas, respectively.

Our method to determine volume at each site involves determining the precipitation from the 25-year, 24-hour event; partitioning the total precipitation into direct runoff and other losses, and then determining the volume of runoff from the total contributing area. Specific methods used in each of these steps are described in the following paragraphs.

Precipitation from rainfall events with various recurrence intervals was obtained from maps published by the National Weather Service (NWS 1973). The total depth of precipitation from the 25-year, 24-hour event is approximately 2.2 inches. To determine how much of this total precipitation becomes runoff and how much infiltrates or is otherwise abstracted, we used a method that relies on a 'curve number'.

The curve number quantifies the effect of soil type and vegetation on how much precipitation becomes runoff. As you might imagine, areas with soils that have high infiltration rates and heavy vegetation growth would tend to have less runoff than areas with low infiltration and little vegetation. We examined soil maps of each area (NRCS 2003) and found that there are variable soils across the different sites. However, all of the soils across the sites are in Hydrologic Group B. Soils are rated in a spectrum from A through D with A type soils representing high infiltration, low runoff soils and D type soils representing low infiltration, high runoff soils. B and C type soils are intermediate.

Based on hydrologic soil groups and land use, the SCS (1986) provided guidance for the selection of a curve number. Based on that guidance we selected a curve number of 74. This curve number represents farmsteads, lanes, buildings, and driveways located on B-type soils. We believe the runoff from feedlots would be similar to hard packed surfaces like lanes, driveways and buildings.

Based on the selected curve number we estimated direct runoff using the equations below:

$$DRO = \frac{(P - 0.2S)^2}{(P + 0.8S)}$$

$$S = \frac{1000 - 10}{CN}$$

Where P = Precipitation in inches from the design event,

DRO = Direct runoff in inches from the design event, and

CN = the curve number.

The estimated direct runoff from the 25-year, 24-hour event (with a total precipitation of 2.2 inches) is 0.45 inches.

This runoff depth from the contributing areas shown on figures 1, 2, and 3 leads to the following detention pond volumes:

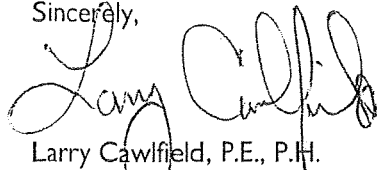
Upper Feedlot	0.76 Acre-Feet
Lower Feedlot	0.53 Acre-Feet
Dairy Area	0.77 Acre-Feet

Bill Dabney  
May 12, 2005  
Page 3 of 3

These are relative small volumes. We suspect that detention ponds can be easily built by excavating a shallow pond and creating a small berm adjacent to the pond with the excavated material at the locations identified on figures 1, 2, and 3.

If you should have any questions regarding this analysis, we would be pleased to discuss them with you.

Sincerely,



Larry Cawlfeld, P.E., P.H.  
Engineer/Hydrologist

#### **Attachments**

Figure 1  
Figure 2  
Figure 3

#### **References**

NRCS 2003. Soil Survey of the Powell County Area, Montana. United States Department of Agriculture, Natural Resource Conservation Service. 2003.

NWS 1973. Precipitation Frequency Atlas of the Western United States, Volume I – Montana. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service. Silver Spring, MD. 1973.

SCS 1986. TR-55 Manual, Second Edition. Soil Conservation Service. June, 1986.

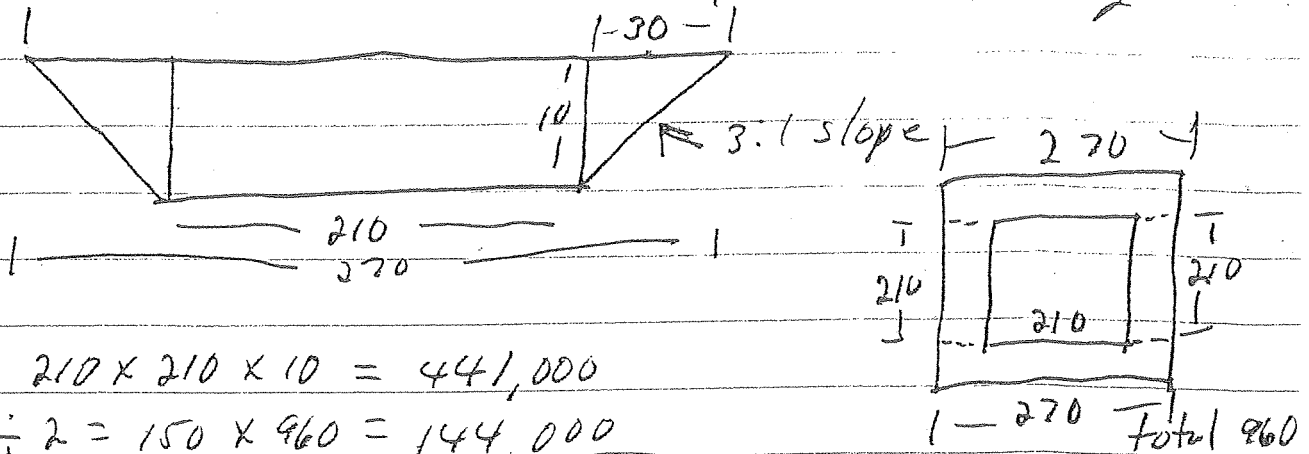
# Attachment B

Drainy LAB 00,rr

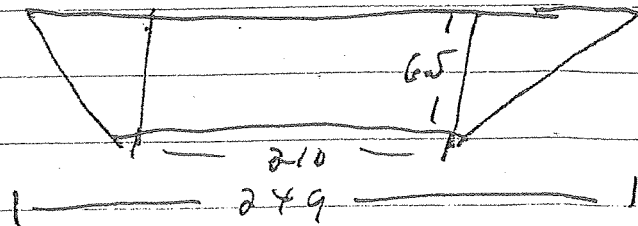
Fill level of Pond on 1/24/97

6.5 feet deep =  $\frac{5.89}{10}$  full

Calculations determined by the following

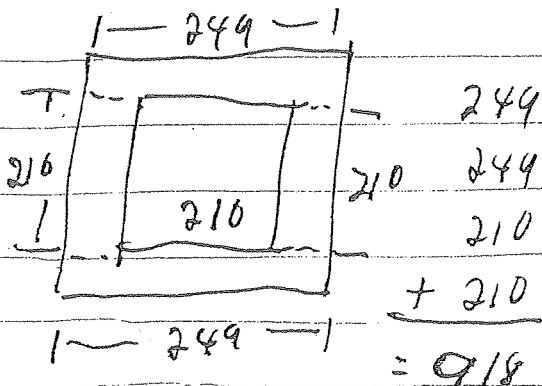


@ 6.5' depth



$210 \times 210 \times 6.5 = 286,650$   
 $+ 6.5 \times 19.5 \div 2 = 63.375 \times 918 = 58,178$

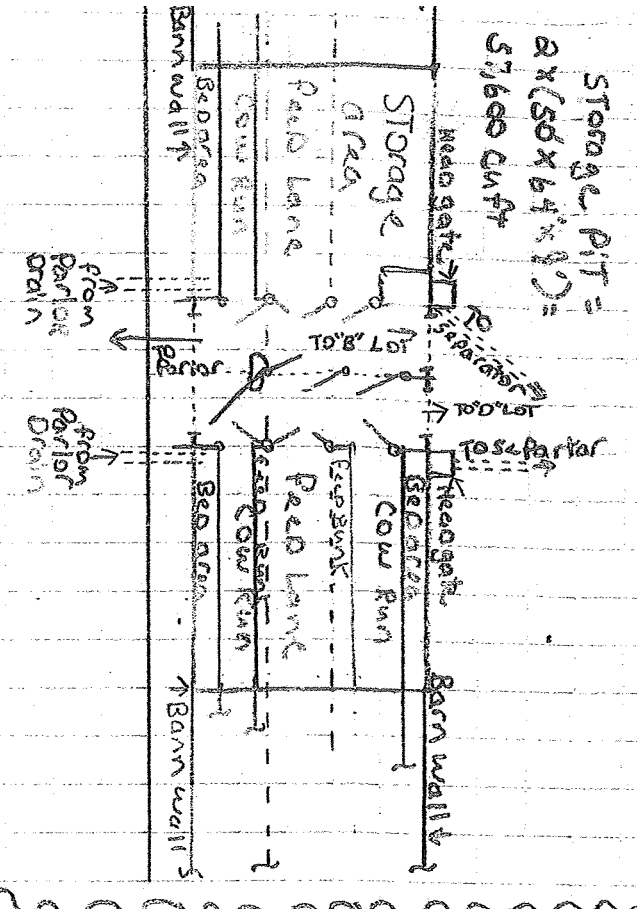
$\Phi 344,728$  vol at 6.5' deep



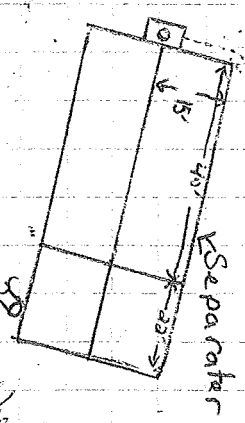
$\frac{344,728}{585,000} = x = \frac{5.89}{10}$



Storage PIT =  
 $2 \times (50' \times 64' \times 1') =$   
 57,600 cu ft



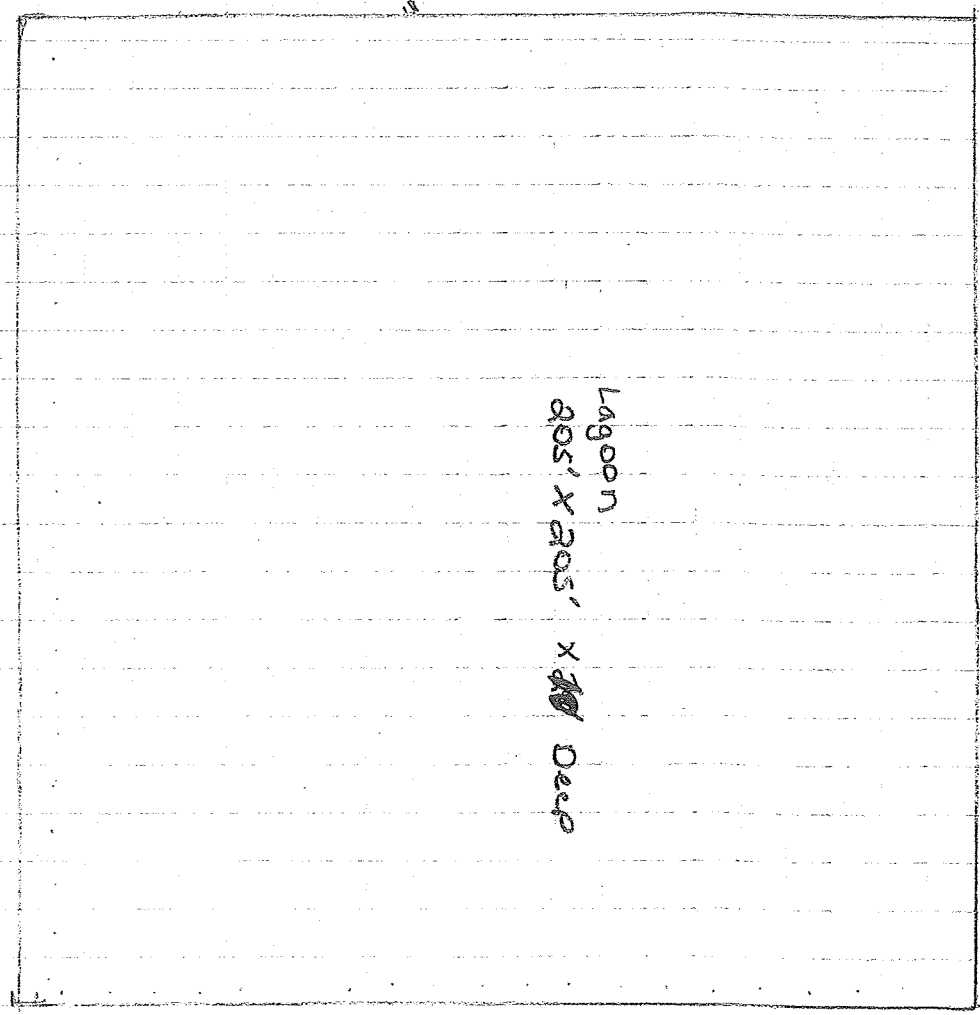
N →



8" Drain from Barn  
 under ground  
 ← 546.5 ft to east headgate

8" Drain from Separator  
 under ground

Separator =  $2 \times (15' \times 40' \times 4') = 4,800$  cu ft



Lagoon  
 205' x 205' x 10' Deep

Attachment B.

Manure Storage & Dairy

Change to Portrait

112W 47' 37"  
-112.79370  
362,000.0

112W 47' 28"  
-112.79111  
362,200.0

112W 47' 19"  
-112.78851  
362,400.0

112W 47' 09"  
-112.78591  
362,600.0

112W 47'  
00"  
-112.78331  
362,800.0

46N 21' 16"  
46.35450  
5,135,000.0

46N 21' 17"  
46.35467  
5,135,000.0

46N 21' 10"  
46.35287  
5,134,800.0

46N 21' 03"  
46.35091  
5,134,600.0

112W 47' 37"  
-112.79359  
362,000.0

112W 47' 28"  
-112.79099  
362,200.0

112W 47' 18"  
-112.78839  
362,400.0

112W 47' 09"  
-112.78579  
362,600.0

46N 21' 04"  
46.35107  
5,134,600.0

112W 47'  
00"  
-112.78319  
362,800.0

0 100M

0 100yd

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Dead Cow Disposal Area  
with coordinates

Attachment C

Cows are Composted before Burial in pit Area



# Chain of Custody and Analytical Request Record

PLEASE PRINT - Provide as much information as possible.

Company Name: <u>Mountain Conservation Enterprises</u>		Project Name, PWS, Permit, Etc.		Sample Origin		EPA/State Compliance:	
Report Mail Address: <u>350 Conley Lake Rd.</u>		Contact Name: <u>Dave Miller</u>		State: <u>MT</u>		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Invoice Address: <u>350 Conley Lake Rd.</u>		Phone/Fax: <u>406-560-0443</u>		Email: <u>dave.miller@mtc.com</u>		Sampler: (Please Print) <u>Dave Miller</u>	
Special Report/Formats - ELI must be notified prior to sample submittal for the following:		Invoice Contact & Phone: <u>Shelley Locke 846-1320 ext 2447</u>		Purchase Order: <u>5142172</u>		Quote/Bottle Order:	
<input type="checkbox"/> DW <input type="checkbox"/> GSA <input type="checkbox"/> POTW/WWTP State: _____ Other: _____		<input type="checkbox"/> A2LA <input type="checkbox"/> EDD/EDT (Electronic Data) Format: _____ <input type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC		ANALYSIS REQUESTED			
Number of Containers		Sample Type: AWSVB Air/Water/Solids/Other		SEE ATTACHED			
Vegetation Bioassay		Nitrogen		R U S H			
MATRIX		Nitrogen		Contact ELI prior to RUSH sample submittal for charges and scheduling - See instruction page			
Collection Date		Collection Time		Cooler ID(s):			
1 <u>Liquid Lagoon Manure</u>		11/26/13 1500		Receipt Temp _____ °C			
2 _____		_____		On Ice: Yes _____ No _____			
3 <u>Dairy Manure</u>		11/26/13 1600		Custody Seal Y N			
4 <u>Feedlot Manure</u>		11/26/13 1600		Intact Y N			
5 _____		_____		Signature Match Y N			
6 _____		_____		LABORATORY USE ONLY			
7 _____		_____					
8 _____		_____					
9 _____		_____					
10 _____		_____					
Relinquished by (print): <u>Dave Miller</u>		Date/Time: <u>11/26/13 1630</u>		Received by (print): _____		Date/Time: _____	
Relinquished by (print): _____		Date/Time: _____		Received by (print): _____		Date/Time: _____	
Custody Record MUST be Signed		Sample Disposal: _____		Return to Client: _____		Signature: _____	

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly noted on your analytical report. Visit our web site at [www.energylab.com](http://www.energylab.com) for additional information, downloadable fee schedule, forms, and links.



ENERGY LABORATORIES, INC. \* 3161 E Lyndale (59604) \* PO Box 5688 \* Helena, MT 59601  
Toll Free 877.472.0711 \* 406.442.0711 \* FAX 406.442.0712 \* helena@energylab.com

**LABORATORY ANALYTICAL REPORT**

Client: MCE Dairy  
Project: Annual Sampling  
Lab ID: H09010164-001  
Client Sample ID: Dairy Manure

Report Date: 02/11/09  
Collection Date: 01/21/09 15:00  
Date Received: 01/22/09  
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>CHEMICAL CHARACTERISTICS</b>							
Nitrate as N, KCL Extract	370	mg/kg	D	10		ASA33-8	02/10/09 15:34 / stp
Total Kjeldahl Nitrogen	6320	mg/kg		10		ASA31-3	01/30/09 00:00 / stp
<b>METALS, TOTAL</b>							
Phosphorus	2200	mg/kg		10		SW6010B	02/06/09 10:20 / sid

**Report  
Definitions:**

RL - Analyte reporting limit.  
QCL - Quality control limit.  
D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.

Attachment ~~E~~ Containment Areas 12-6-13  
GPS Points + measure Application Maps

#1 Lower Feed Lot. North Side

Corner Gate Elevation 4724'

N  $46^{\circ} 23.388'$

W  $112^{\circ} 47.894'$

#2 Upper Feedlot North East Corner

Elevation 4808' Contain next Pond Dyke

North  $46^{\circ} 22.467'$

West  $112^{\circ} 47.723'$

to Tin Cup Cr. Road Crossing 4717' Flow of Containment.

#3 Dairy Office

Elevation 4880'

N.  $46^{\circ} 23.280'$

West  $112^{\circ} 48.680'$

Separator East End Center Top

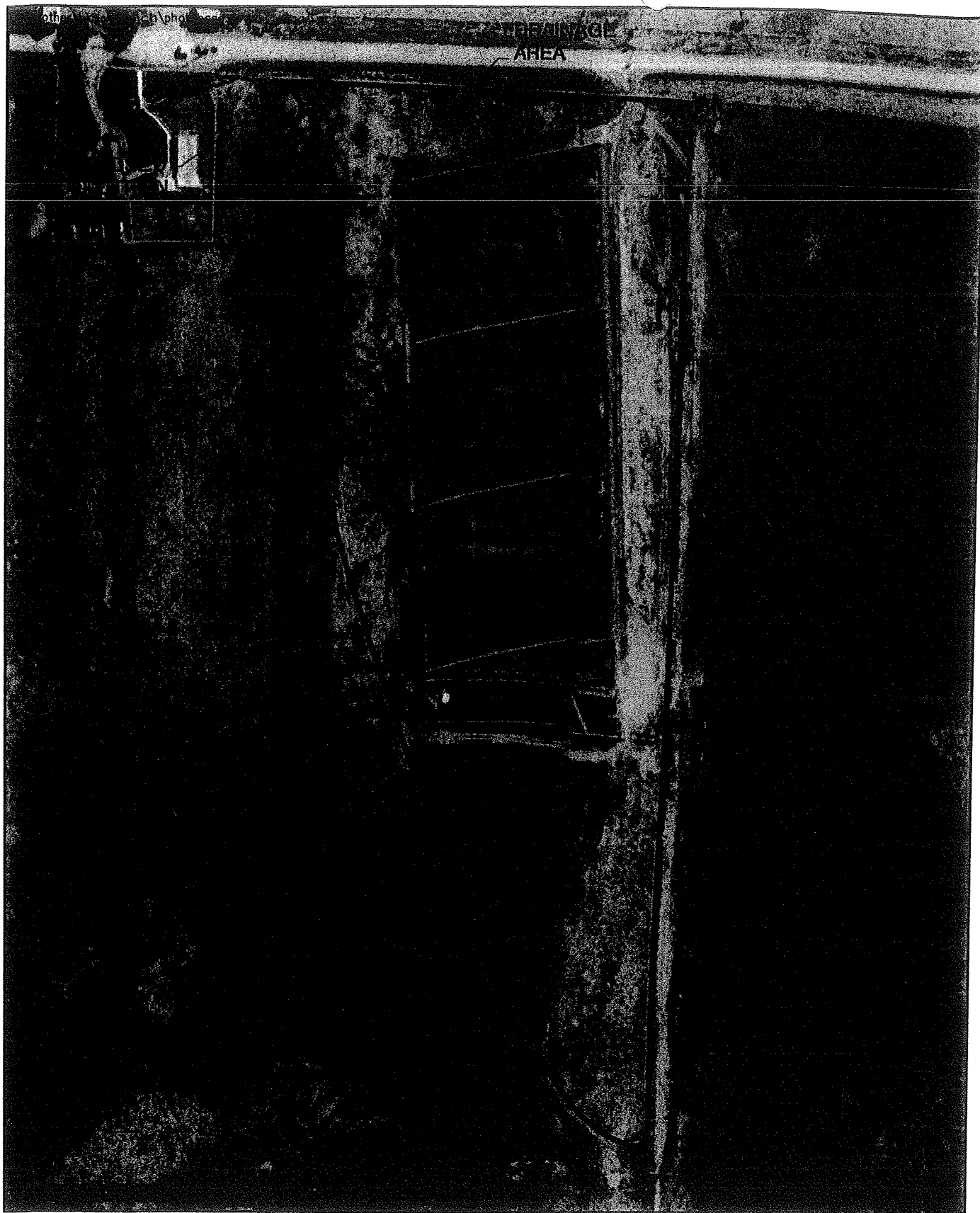
Elevation 4822'

N.  $46^{\circ} 23.374'$

W.  $112^{\circ} 48.607'$

Containment Bern Below Dairy

4840' N  $46^{\circ} 23.200'$  W.  $112^{\circ} 48.507'$



0 Feet 200

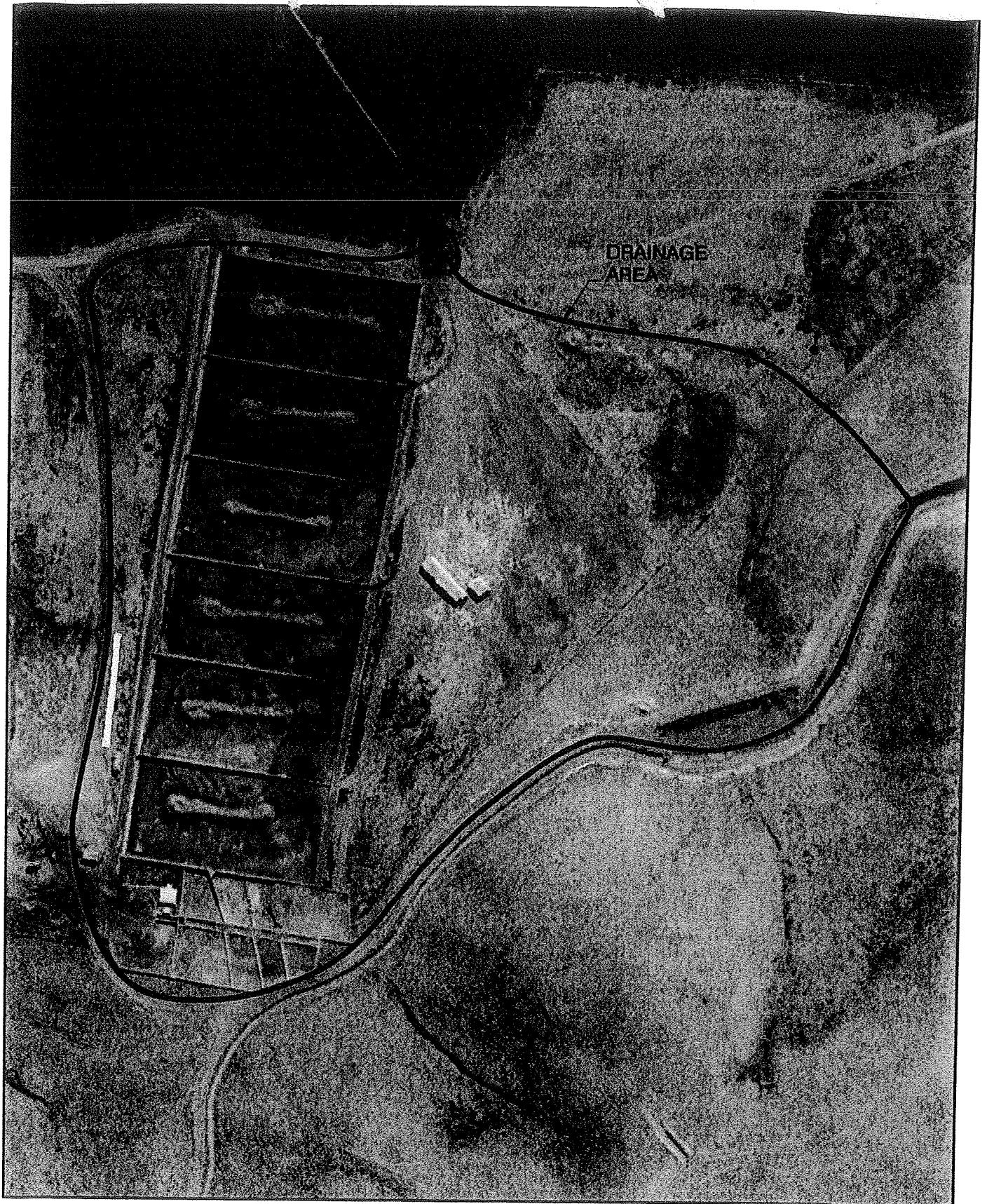
**MAXIM**  
TECHNOLOGIES 5561003.100

May 2005

*Attachment E*

Lower Feedlot Drainage Area  
Montana Correctional Enterprises CAFO Permitting  
Deerlodge, Montana  
**FIGURE 1**





May 2005

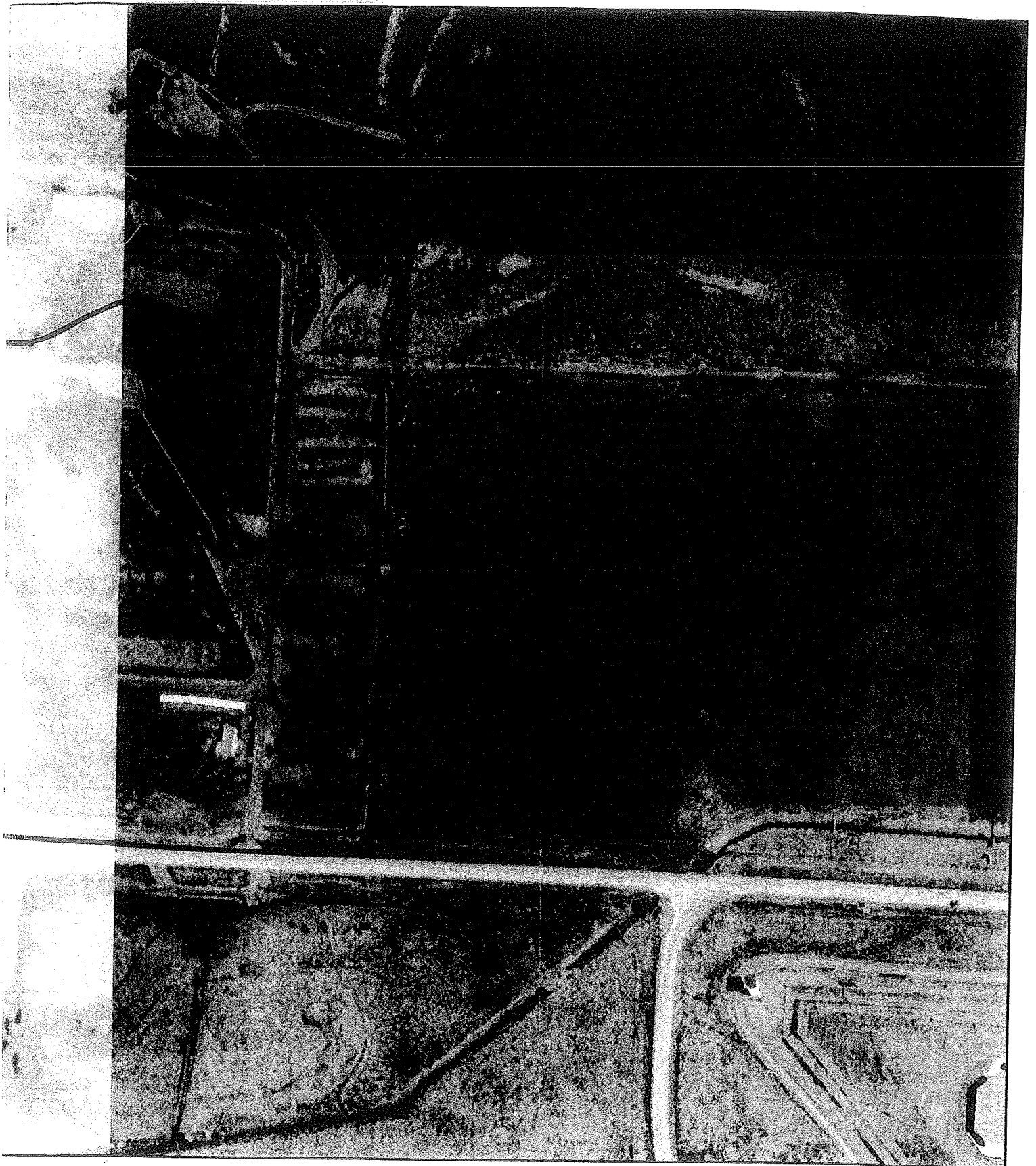


0 Feet 200

**MAXIM**  
TECHNOLOGIES 5561003.100

Upper Feedlot Drainage Area  
Montana Correctional Enterprises CAFO Permitting  
Deerlodge, Montana  
**FIGURE 2**

*Attachment E*

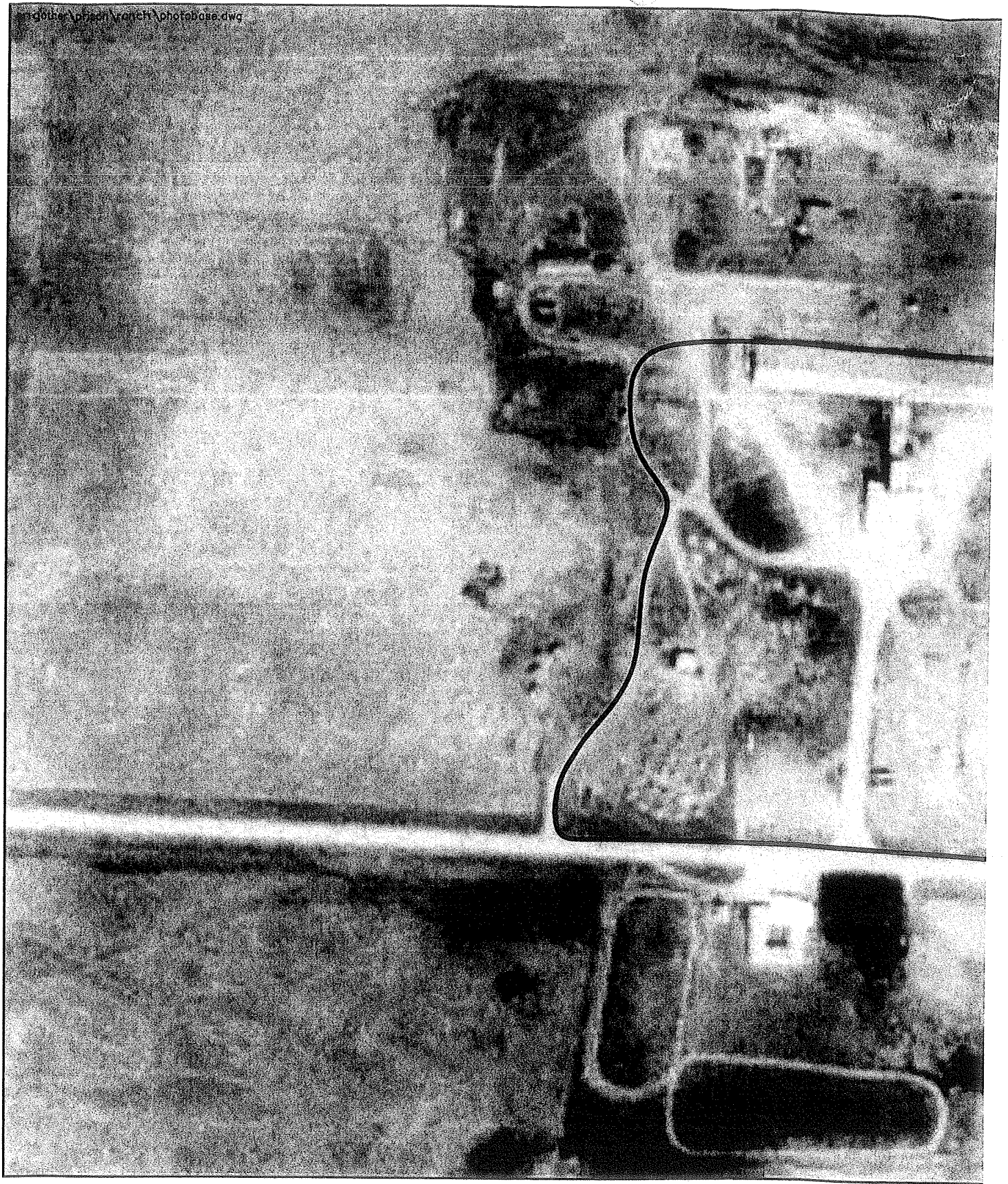


May 2005

Attachment E  
Dairy Berm

Dairy Drainage Area  
Montana Correctional Enterprises CAFO Permitting  
Deerlodge, Montana  
FIGURE 3





0 Feet 200

**MAXIM**  
TECHNOLOGIES 5561003.100

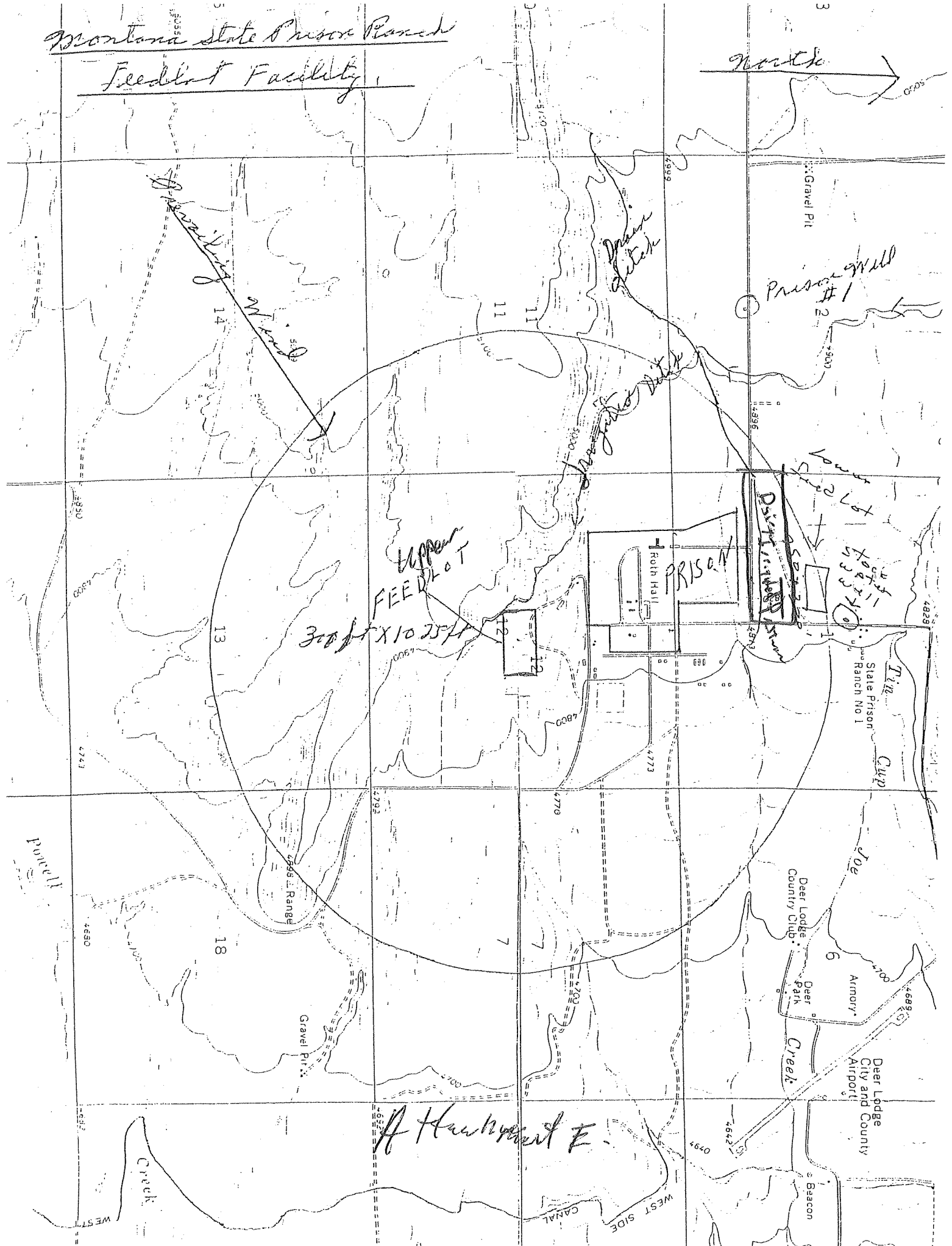
*Handwritten: #Handwritten E*

*Handwritten: Upper Dairy Diversion Area*

Montana State Prison Ranch

Feeding Facility

North





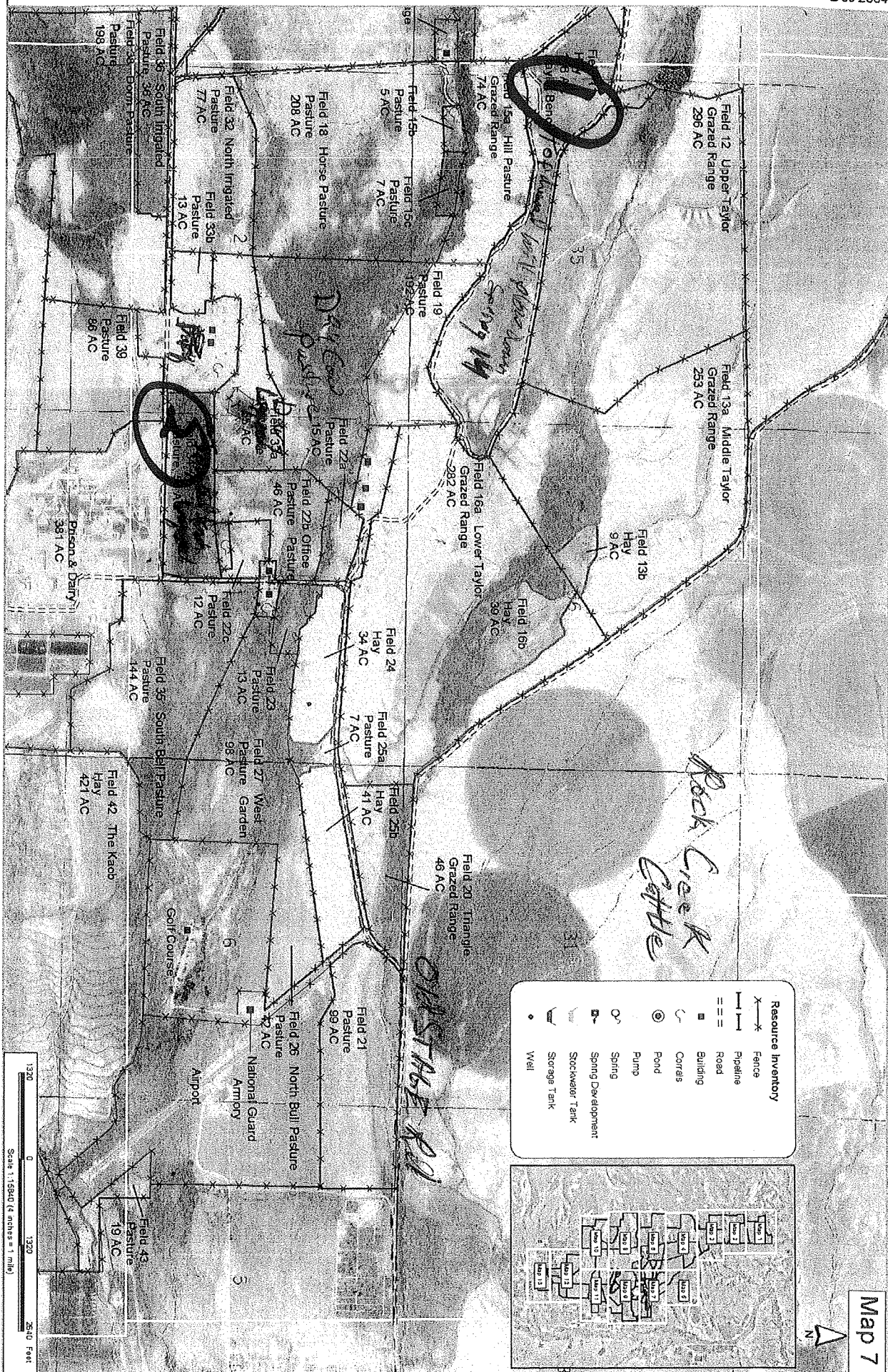
## Dec 2004

b7c b7d

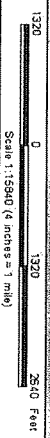
Taggart

Attachment of E

Map 7



2013 Application Map



Attachment E

May 6

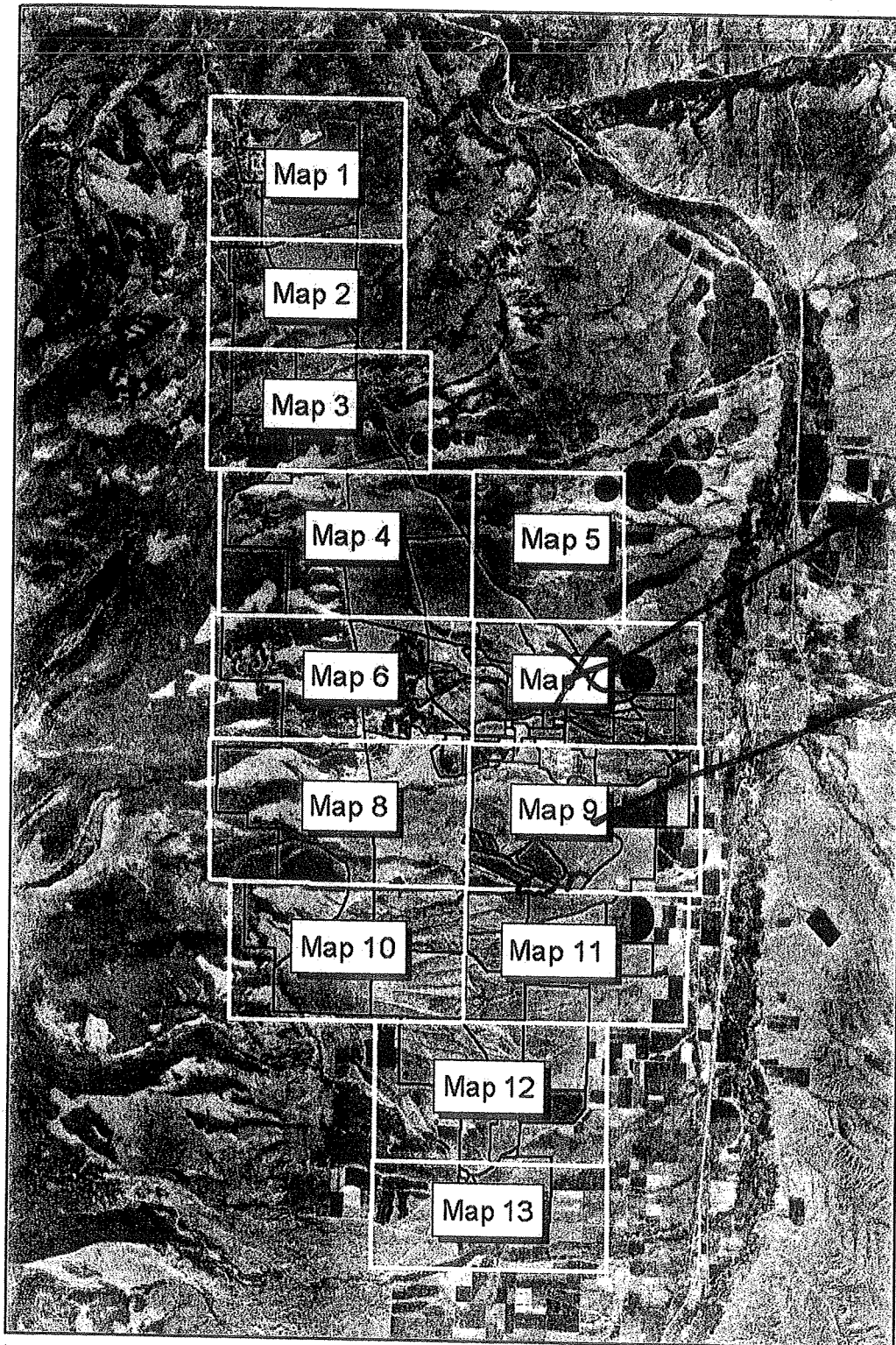


2013 Application Maps



# Montana State Prison Ranch Planning Maps

RECEIVED  
JAN 15 2015  
DECOMP  
PERMITTING & COMPLIANCE DIV  
1/15/2015



Note: Maps created in ArcView and exported as JPEG files.  
Maps are 4 inches per mile on 11x17 paper.  
Exporting maps as jpeg files slightly distorts the scale.  
Actual scale is about 3.8 inches per mile.

SOIL I

The publication symbols consist of field symbols. Symbols consist of numbers or a combination of number and letter, the number designates the soil type and the letter designates the slope class. The symbols will

SYMBOL	NAME	SYMBOL	NAME
2	Dougcliff mucky peat, 0 to 2 percent slopes, ponded	86G	Winkler gravelly loam, 60 to 80 percent slopes
4	Aquents-Slickens complex, 0 to 2 percent slopes, occasionally flooded	87D	Danaher loam, 4 to 15 percent slopes
5	Slickens-Aquents complex, 0 to 2 percent slopes, occasionally flooded	87E	Danaher loam, 15 to 35 percent slopes
6B	Elliston loam, 0 to 4 percent slopes, rarely flooded	88E	Whitecow gravelly loam, dry, 15 to 35 percent slopes
7	Fluvaquents-Endoaquolls complex, 0 to 2 percent slopes, occasionally flooded	88F	Whitecow gravelly loam, dry, 35 to 60 percent slopes
10	Bushong loam, taxadjunct, 0 to 4 percent slopes	88G	Whitecow gravelly loam, dry, 60 to 80 percent slopes
10A	Mccabe-Canarway complex, impacted, 0 to 2 percent slopes, occasionally flooded	90F	Mocmont very gravelly loam, moist, 35 to 60 percent slopes
11A	Mccabe-Canarway complex, 0 to 2 percent slopes, occasionally flooded	91E	Rittel loam, 15 to 35 percent slopes
24B	Con loam, 0 to 4 percent slopes	92E	Whitore gravelly loam, 15 to 35 percent slopes
24C	Con loam, 4 to 8 percent slopes	92F	Whitore gravelly loam, 35 to 60 percent slopes
24D	Con loam, 8 to 15 percent slopes	93E	Tigeron very gravelly loam, 15 to 35 percent slopes
25B	Straw loam, 0 to 4 percent slopes	93F	Tigeron very gravelly loam, 35 to 60 percent slopes
31B	Varney clay loam, 0 to 4 percent slopes	95D	Yreka gravelly loam, 8 to 15 percent slopes
31C	Varney clay loam, 4 to 8 percent slopes	95E	Yreka gravelly loam, 15 to 35 percent slopes
31D	Varney clay loam, 8 to 15 percent slopes	95F	Yreka gravelly loam, 35 to 60 percent slopes
34B	Cetrack loam, 0 to 4 percent slopes	96D	Worock gravelly loam, cool, 8 to 15 percent slopes
34C	Cetrack loam, 4 to 8 percent slopes	96E	Worock gravelly loam, cool, 15 to 35 percent slopes
35B	Anaconda loam, 0 to 4 percent slopes	96F	Worock gravelly loam, cool, 35 to 60 percent slopes
36B	Varney-Con loams, 0 to 4 percent slopes	97D	Evoro gravelly loam, dry, 4 to 15 percent slopes
36C	Varney-Con loams, 4 to 8 percent slopes	97E	Evoro gravelly loam, dry, 15 to 35 percent slopes
36D	Varney-Con loams, 8 to 15 percent slopes	97F	Evoro gravelly loam, dry, 35 to 60 percent slopes
39C	Winspect gravelly loam, 4 to 8 percent slopes	98E	Trapps gravelly loam, 15 to 35 percent slopes
39D	Winspect gravelly loam, 8 to 15 percent slopes	98F	Trapps gravelly loam, 35 to 60 percent slopes
39E	Winspect gravelly loam, 15 to 35 percent slopes	99D	Bignell gravelly clay loam, 8 to 15 percent slopes
39F	Winspect gravelly loam, 35 to 60 percent slopes	99E	Bignell gravelly clay loam, 15 to 35 percent slopes
40C	Fergus-Water complex, 2 to 8 percent slopes	99F	Bignell gravelly clay loam, 35 to 60 percent slopes
41B	Perma gravelly loam, 0 to 4 percent slopes	100	Rubble land-Rock outcrop complex
41C	Perma gravelly loam, 4 to 8 percent slopes	102	Pits, gravelly
41D	Perma gravelly loam, 8 to 15 percent slopes	103	Dumps, mine
41E	Perma gravelly loam, 15 to 35 percent slopes	104A	Fluvaquentic Endoaquolls-Slickens complex, 0 to 2 percent slopes, severely
41F	Perma gravelly loam, 35 to 60 percent slopes	105A	Slickens-Fluvaquentic Endoaquolls complex, 0 to 2 percent slopes, severely
42E	Windham gravelly loam, 15 to 35 percent slopes	109	Bohnlly silt loam, 0 to 2 percent slopes
42F	Windham gravelly loam, 35 to 60 percent slopes	110	Carten-Wetsand complex, 0 to 2 percent slopes, rarely flooded
45D	Redchief cobbly loam, 4 to 15 percent slopes	131E	Varney cobbly clay loam, 15 to 35 percent slopes
45E	Redchief cobbly loam, 15 to 35 percent slopes	131F	Varney cobbly clay loam, 35 to 50 percent slopes
46B	Roy gravelly loam, 0 to 4 percent slopes	132B	Beaverell cobbly loam, 0 to 4 percent slopes
46C	Roy gravelly loam, 4 to 8 percent slopes	132C	Beaverell cobbly loam, 4 to 8 percent slopes
46D	Roy gravelly loam, 8 to 15 percent slopes	135B	Baggs sandy loam, 0 to 4 percent slopes
48D	Mollet loam, 4 to 15 percent slopes	135C	Baggs sandy loam, 4 to 8 percent slopes
48E	Mollet loam, 15 to 35 percent slopes	135D	Baggs sandy loam, 8 to 15 percent slopes
49B	Danvers clay loam, 0 to 4 percent slopes	136E	Varney-Con complex, 15 to 35 percent slopes
49C	Danvers clay loam, 4 to 8 percent slopes	137B	Sixbeacon cobbly loam, 0 to 4 percent slopes
49D	Danvers clay loam, 8 to 15 percent slopes	137C	Sixbeacon cobbly loam, 4 to 8 percent slopes
50C	Monad loam, 2 to 8 percent slopes	137D	Sixbeacon cobbly loam, 8 to 15 percent slopes
50D	Monad loam, 8 to 15 percent slopes	146D	Roy cobbly loam, 8 to 15 percent slopes
50E	Monad loam, 15 to 35 percent slopes	146E	Roy cobbly loam, 15 to 35 percent slopes
51B	Shawmut gravelly loam, 0 to 4 percent slopes	149B	Danvers cobbly clay loam, 0 to 4 percent slopes
51C	Shawmut gravelly loam, 4 to 8 percent slopes	149C	Danvers cobbly clay loam, 4 to 8 percent slopes
51D	Shawmut gravelly loam, 8 to 15 percent slopes	149D	Danvers cobbly clay loam, 8 to 15 percent slopes
52B	Martinsdale loam, 0 to 4 percent slopes	151C	Shawmut cobbly loam, 4 to 8 percent slopes
52C	Martinsdale loam, 4 to 8 percent slopes	151D	Shawmut cobbly loam, 8 to 15 percent slopes
52D	Martinsdale loam, 8 to 15 percent slopes	151E	Shawmut cobbly loam, 15 to 35 percent slopes
53B	Shawmut-Martinsdale complex, 0 to 4 percent slopes	151F	Shawmut cobbly loam, 35 to 60 percent slopes
53C	Shawmut-Martinsdale complex, 4 to 8 percent slopes	152B	Clasoiil sandy loam, 0 to 4 percent slopes
54D	Libeg gravelly loam, 8 to 15 percent slopes	152C	Clasoiil sandy loam, 4 to 8 percent slopes
54E	Libeg gravelly loam, 15 to 35 percent slopes	152D	Clasoiil sandy loam, 8 to 15 percent slopes
58B	Coben loam, 0 to 4 percent slopes	168C	Dolus-Boxwell complex, 4 to 8 percent slopes
58C	Coben loam, 4 to 8 percent slopes	168D	Dolus-Boxwell complex, 8 to 15 percent slopes
58D	Coben loam, 8 to 15 percent slopes	168E	Dolus-Boxwell complex, 15 to 35 percent slopes
60B	Quigley loam, 0 to 4 percent slopes	169F	Doney-Dolus channery loams, 15 to 45 percent slopes
60C	Quigley loam, 4 to 8 percent slopes	171C	Winfall-Rumblecreek gravelly loams, 2 to 8 percent slopes
60D	Quigley loam, 8 to 15 percent slopes	171E	Winfall-Rumblecreek gravelly loams, 8 to 25 percent slopes
63C	Quigley-Straw-Water complex, 2 to 8 percent slopes	171F	Winfall-Rumblecreek gravelly loams, 25 to 50 percent slopes
63E	Quigley-Straw-Water complex, 8 to 25 percent slopes	179E	Ambrant-Rochester complex, 15 to 35 percent slopes
65C	Tanna loam, 4 to 8 percent slopes	179F	Ambrant-Rochester complex, 35 to 60 percent slopes
65D	Tanna loam, 8 to 15 percent slopes	180F	Ovando-Elkner complex, 35 to 60 percent slopes
69C	Boxwell loam, 4 to 8 percent slopes	184E	Helmville cobbly loam, moist, 15 to 35 percent slopes
69D	Boxwell loam, 8 to 15 percent slopes	184F	Helmville cobbly loam, moist, 35 to 60 percent slopes
69E	Boxwell loam, 15 to 35 percent slopes	185E	Relyea-Helmville complex, 15 to 35 percent slopes
71C	Winfall gravelly loam, 2 to 8 percent slopes	185F	Relyea-Helmville complex, 35 to 60 percent slopes
71E	Winfall gravelly loam, 8 to 25 percent slopes	190E	Mocmont very gravelly loam, 15 to 35 percent slopes
71F	Winfall gravelly loam, 25 to 50 percent slopes	190F	Mocmont very gravelly loam, 35 to 60 percent slopes
79D	Ambrant-Rochester complex, cool, 4 to 15 percent slopes	195E	Yreka gravelly loam, cool, 15 to 35 percent slopes
79E	Ambrant-Rochester complex, cool, 15 to 35 percent slopes	195F	Yreka gravelly loam, cool, 35 to 60 percent slopes
79F	Ambrant-Rochester complex, cool, 35 to 60 percent slopes	196E	Worock-Loberg complex, 15 to 35 percent slopes
80E	Elkner-Ovando complex, 15 to 35 percent slopes	196F	Worock-Loberg complex, 35 to 60 percent slopes
80F	Elkner-Ovando complex, 35 to 60 percent slopes	197D	Evoro gravelly loam, 4 to 15 percent slopes
82D	Elve gravelly loam, 4 to 15 percent slopes	197E	Evoro gravelly loam, 15 to 35 percent slopes
82E	Elve gravelly loam, 15 to 35 percent slopes	197F	Evoro gravelly loam, 35 to 60 percent slopes
82F	Elve gravelly loam, 35 to 60 percent slopes	198E	Trapps-Yreka stony loams, 8 to 25 percent slopes
83D	Crow clay loam, 4 to 15 percent slopes	199E	Bignell gravelly clay loam, cool, 15 to 35 percent slopes
83E	Crow clay loam, 15 to 35 percent slopes	199F	Bignell gravelly clay loam, cool, 35 to 60 percent slopes
84D	Helmville cobbly loam, 8 to 15 percent slopes	200E	Braziel-Tolbert-Rock outcrop complex, 15 to 35 percent slopes
84E	Helmville cobbly loam, 15 to 35 percent slopes	200F	Braziel-Tolbert-Rock outcrop complex, 35 to 60 percent slopes
84F	Helmville cobbly loam, 35 to 60 percent slopes	236B	Varney sandy clay loam, 2 to 4 percent slopes
85D	Loberg gravelly loam, 4 to 15 percent slopes	236C	Varney sandy clay loam, 4 to 8 percent slopes
85E	Loberg gravelly loam, 15 to 35 percent slopes	236D	Varney sandy clay loam, 8 to 15 percent slopes
86D	Winkler gravelly loam, 8 to 15 percent slopes	237B	Sixbeacon gravelly loam, 0 to 4 percent slopes
86E	Winkler gravelly loam, 15 to 35 percent slopes	237C	Sixbeacon gravelly loam, 4 to 8 percent slopes
86F	Winkler gravelly loam, 35 to 60 percent slopes	241B	Perma stony loam, 0 to 4 percent slopes

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SYMBOL

534	Gregson loam, cool
535	Saypo loam, cool, C
542E	Perma very boulder
542F	Perma very boulder
544	Gregson loam, 0 to
545	Saypo loam, 0 to 4
547	Kleinschmidt gravel
549	Marcott silty clay lo
551F	Shawmut extremely
552C	Claisol-Crackerville
552D	Claisol-Crackerville
552E	Claisol-Crackerville
557	Kleinschmidt gravel
562	Carten loam, 0 to 4
580E	Comad-Elkner com
580F	Comad-Elkner com
596D	Worock, cool-Lober
596E	Worock, cool-Lober
596F	Worock, cool-Lober
599D	Silverchief-Trapps c
599E	Silverchief-Trapps c
632	Bushong loam, 0 to
634	Blossberg loam, 0 to
635	Tetonview loam, 0 to
637	Poronto loam, 0 to 4
642E	Perma extremely bc
649	Turrah silty clay loam
651C	Shawmut-Winspect
651E	Shawmut-Winspect
651F	Shawmut-Winspect
680F	Comad-Rubble land
682E	Elve bouldery sandy
682F	Elve bouldery sandy
696E	Worock gravelly loam
696F	Worock gravelly loam
699D	Bignell gravelly loam
699E	Bignell gravelly loam
699F	Bignell gravelly loam
735	Tetonview-Blossber
742E	Brazil-Perma-Wate
742F	Brazil-Perma-Wate
752E	Claisol-Crackerville
780E	Ovando-Elkner-Rocl
780F	Ovando, moist-Elkne
786D	Winkler gravelly loar
786E	Winkler gravelly loar
786F	Winkler gravelly loar
786G	Winkler gravelly loar
788F	Whitecow, cool-Roc
799D	Bignell-Yreka-Crow
799E	Bignell-Yreka-Crow
824E	Con-Sixbeacon cobt
824F	Con-Sixbeacon cobt
832	Bushong loam, 0 to
834	Blossberg loam, 0 to
835	Tetonview loam, 0 to
837	Poronto loam, 0 to 4
838E	Perma-Whitlash-Roc
838F	Perma-Whitlash-Roc
839E	Windham-Lap gravel
839F	Windham-Lap gravel
845D	Redchief-Copenhav
845E	Redchief-Copenhav
846D	Roy-Tolbert complex
846E	Roy-Tolbert complex
846F	Roy-Tolbert complex
854D	Libeg-Monad-Copeni
854E	Libeg-Monad-Copeni
854F	Libeg-Monad-Copeni
883E	Crow-Bignell comple
883F	Crow-Bignell comple
886E	Winkler-Rubble land
886F	Winkler-Rubble land
886G	Winkler-Rubble land
982F	Elve-Rock outcrop c
983D	Crow-Bignell comple
983E	Crow-Bignell comple
988F	Whitecow-Rock outcr
988G	Whitecow-Rock outcr
995E	Yreka-Rock outcrop c
995F	Yreka-Rock outcrop c
996E	Worock-Rock outcrop
996F	Worock-Rock outcrop
998D	Bignell-Rumblecreek
999E	Bignell-Rumblecreek
999F	Bignell-Rumblecreek
M-W	Miscellaneous Water
W	Water

designated by a number and  
merically by field symbols.

## SYMBOL

## NAME

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534 Gregson loam, cool, 0 to 4 percent slopes  
535 Saypo loam, cool, 0 to 4 percent slopes  
542E Perma very bouldery loam, 8 to 25 percent slopes  
542F Perma very bouldery loam, 25 to 50 percent slopes  
544 Gregson loam, 0 to 4 percent slopes  
545 Saypo loam, 0 to 4 percent slopes  
547 Kleinschmidt gravelly loam, cool, 0 to 4 percent slopes  
549 Marcott silty clay loam, 0 to 4 percent slopes  
551F Shawmut extremely bouldery loam, 8 to 50 percent slopes  
552C Clasoil-Crackerville complex, 4 to 8 percent slopes  
552D Clasoil-Crackerville complex, 8 to 15 percent slopes  
552E Clasoil-Crackerville complex, 15 to 35 percent slopes  
557 Kleinschmidt gravelly loam, 0 to 4 percent slopes  
562 Carlen loam, 0 to 4 percent slopes  
580E Comad-Elkner complex, 15 to 35 percent slopes  
580F Comad-Elkner complex, 35 to 60 percent slopes  
596D Worock, cool-Loberg complex, 8 to 15 percent slopes  
596E Worock, cool-Loberg complex, 15 to 35 percent slopes  
596F Worock, cool-Loberg complex, 35 to 60 percent slopes  
599D Silverchief-Trapps complex, 8 to 15 percent slopes  
599E Silverchief-Trapps complex, 15 to 35 percent slopes  
632 Bushong loam, 0 to 4 percent slopes  
634 Blossberg loam, 0 to 4 percent slopes  
635 Tetonview loam, 0 to 4 percent slopes  
637 Poronto loam, 0 to 4 percent slopes  
642E Perma extremely bouldery loam, 8 to 50 percent slopes  
649 Turrah silty clay loam, 0 to 4 percent slopes  
651C Shawmut-Winspect-Water complex, 2 to 8 percent slopes  
651E Shawmut-Winspect-Water complex, 8 to 25 percent slopes  
651F Shawmut-Winspect-Water complex, 25 to 50 percent slopes  
680F Comad-Rubble land complex, 35 to 60 percent slopes  
682E Elve bouldery sandy loam, 8 to 25 percent slopes  
682F Elve bouldery sandy loam, 25 to 50 percent slopes  
696E Worock gravelly loam, dry, 15 to 35 percent slopes  
696F Worock gravelly loam, dry, 35 to 60 percent slopes  
699D Bignell gravelly loam, 8 to 15 percent slopes  
699E Bignell gravelly loam, 15 to 35 percent slopes  
699F Bignell gravelly loam, 35 to 60 percent slopes  
735 Tetonview-Blossberg loams, 0 to 4 percent slopes, rarely flooded  
742E Braziel-Perma-Water complex, 8 to 25 percent slopes  
742F Braziel-Perma-Water complex, 25 to 50 percent slopes  
752E Clasoil-Crackerville-Rock outcrop complex, 15 to 35 percent slopes  
780E Ovando-Elkner-Rock outcrop complex, 15 to 35 percent slopes  
780F Ovando, moist-Elkner-Rock outcrop complex, 35 to 60 percent slopes  
786D Winkler gravelly loam, cool, 8 to 15 percent slopes  
786E Winkler gravelly loam, cool, 15 to 35 percent slopes  
786F Winkler gravelly loam, cool, 35 to 60 percent slopes  
786G Winkler gravelly loam, cool, 60 to 80 percent slopes  
788F Whitecow, cool-Rock outcrop complex, 35 to 60 percent slopes  
799D Bignell-Yreka-Crow complex, 8 to 15 percent slopes  
799E Bignell-Yreka-Crow complex, 15 to 35 percent slopes  
824E Con-Sixbeacon cobbly loams, 15 to 35 percent slopes  
824F Con-Sixbeacon cobbly loams, 35 to 60 percent slopes  
832 Bushong loam, 0 to 4 percent slopes, rarely flooded  
834 Blossberg loam, 0 to 4 percent slopes, rarely flooded  
835 Tetonview loam, 0 to 4 percent slopes, rarely flooded  
837 Poronto loam, 0 to 4 percent slopes, rarely flooded  
838E Perma-Whitlash-Rock outcrop complex, 15 to 35 percent slopes  
838F Perma-Whitlash-Rock outcrop complex, 35 to 60 percent slopes  
839E Windham-Lap gravelly loams, 15 to 35 percent slopes  
839F Windham-Lap gravelly loams, 35 to 60 percent slopes  
845D Redchief-Copenhaver gravelly loams, 8 to 15 percent slopes  
845E Redchief-Copenhaver gravelly loams, 15 to 35 percent slopes  
846D Roy-Tolbert complex, 8 to 15 percent slopes  
846E Roy-Tolbert complex, 15 to 35 percent slopes  
846F Roy-Tolbert complex, 35 to 60 percent slopes  
854D Libeg-Monad-Copenhaver complex, 8 to 15 percent slopes  
854E Libeg-Monad-Copenhaver complex, 15 to 35 percent slopes  
854F Libeg-Monad-Copenhaver complex, 35 to 60 percent slopes  
883E Crow-Bignell complex, moist, 8 to 25 percent slopes  
883F Crow-Bignell complex, moist, 25 to 50 percent slopes  
886E Winkler-Rubble land-Rock outcrop complex, 15 to 35 percent slopes  
886F Winkler-Rubble land-Rock outcrop complex, 35 to 60 percent slopes  
886G Winkler-Rubble land-Rock outcrop complex, 60 to 80 percent slopes  
982F Elve-Rock outcrop complex, 35 to 60 percent slopes  
983D Crow-Bignell complex, 8 to 15 percent slopes  
983E Crow-Bignell complex, 15 to 35 percent slopes  
988F Whitecow-Rock outcrop complex, 35 to 60 percent slopes  
988G Whitecow-Rock outcrop complex, 60 to 80 percent slopes  
995E Yreka-Rock outcrop complex, 15 to 35 percent slopes  
995F Yreka-Rock outcrop complex, 35 to 60 percent slopes  
996E Worock-Rock outcrop complex, 15 to 35 percent slopes  
996F Worock-Rock outcrop complex, 35 to 60 percent slopes  
999D Bignell-Rumblecreek complex, 8 to 15 percent slopes  
999E Bignell-Rumblecreek complex, 15 to 35 percent slopes  
999F Bignell-Rumblecreek complex, 35 to 60 percent slopes  
M-W Miscellaneous Water  
W Water

## BOUNDARIES

County or parish

Reservation (national forest or park, state  
forest or park, and large airport)Limit of soil survey (label)  
and/or denied access areasPublic Land Survey System  
Section Boundary

## ROAD EMBLEM &amp; DESIGNATIONS

Interstate

Federal

State

## PITS



# ADDITIONAL AND SPECIAL SYMBOLS LEGEND

ES

PERMANENT WATER FEATURES

Swamp

## SPECIAL SYMBOLS FOR SOIL SURVEY

SOIL DELINEATIONS AND SYMBOLS

SHORT STEEP SLOPE

MISCELLANEOUS

Clay spot

Closed depression

Gravelly spot

Rock outcrop (includes sandstone and shale)

Saline spot

Slide or slip (tips point upslope)

Spoil area

Stony spot

Very stony spot

# Montana State Prison Ranch

Dec 2004

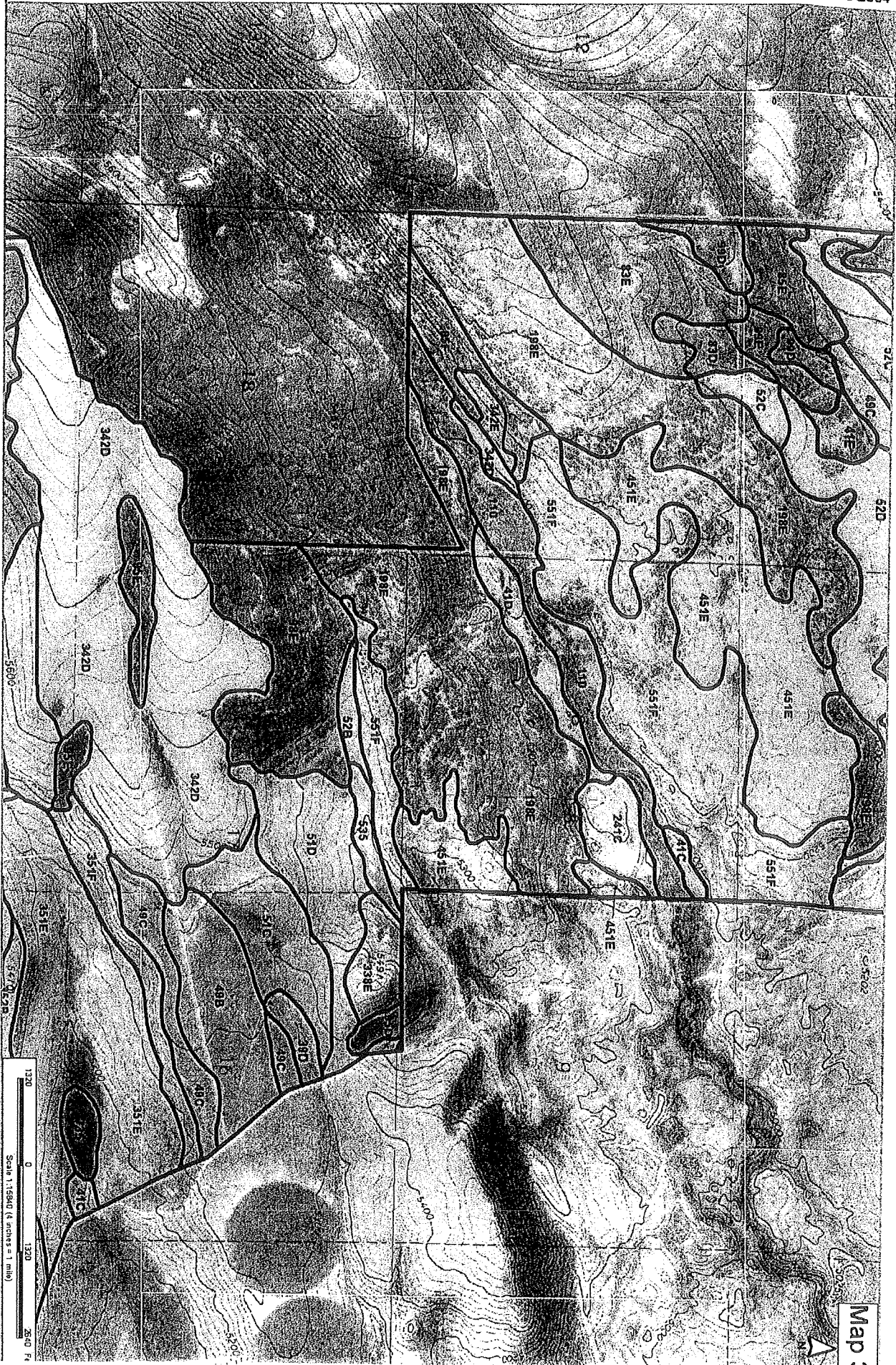


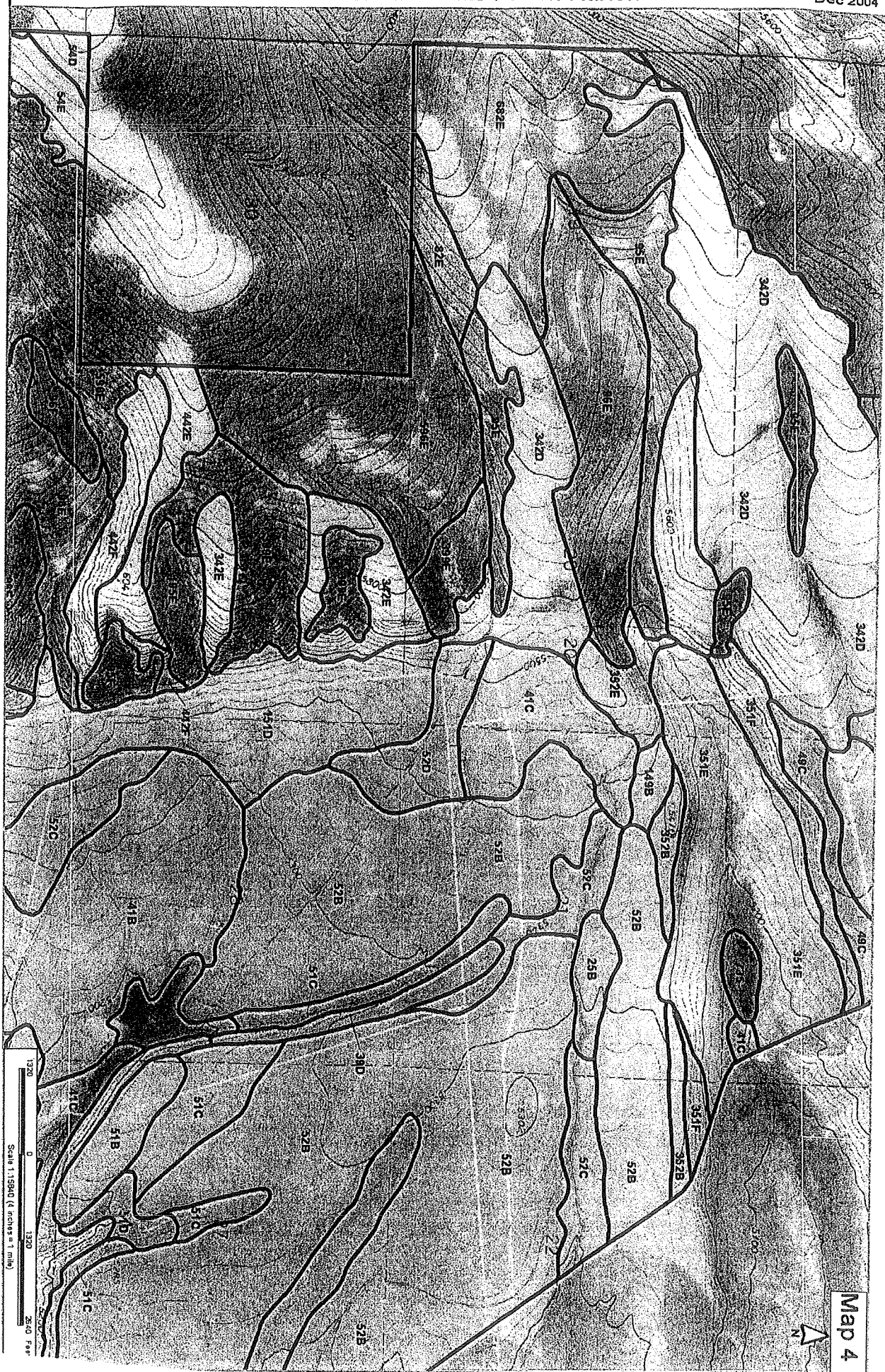
# Montana State Prison Ranch

Dec 2004





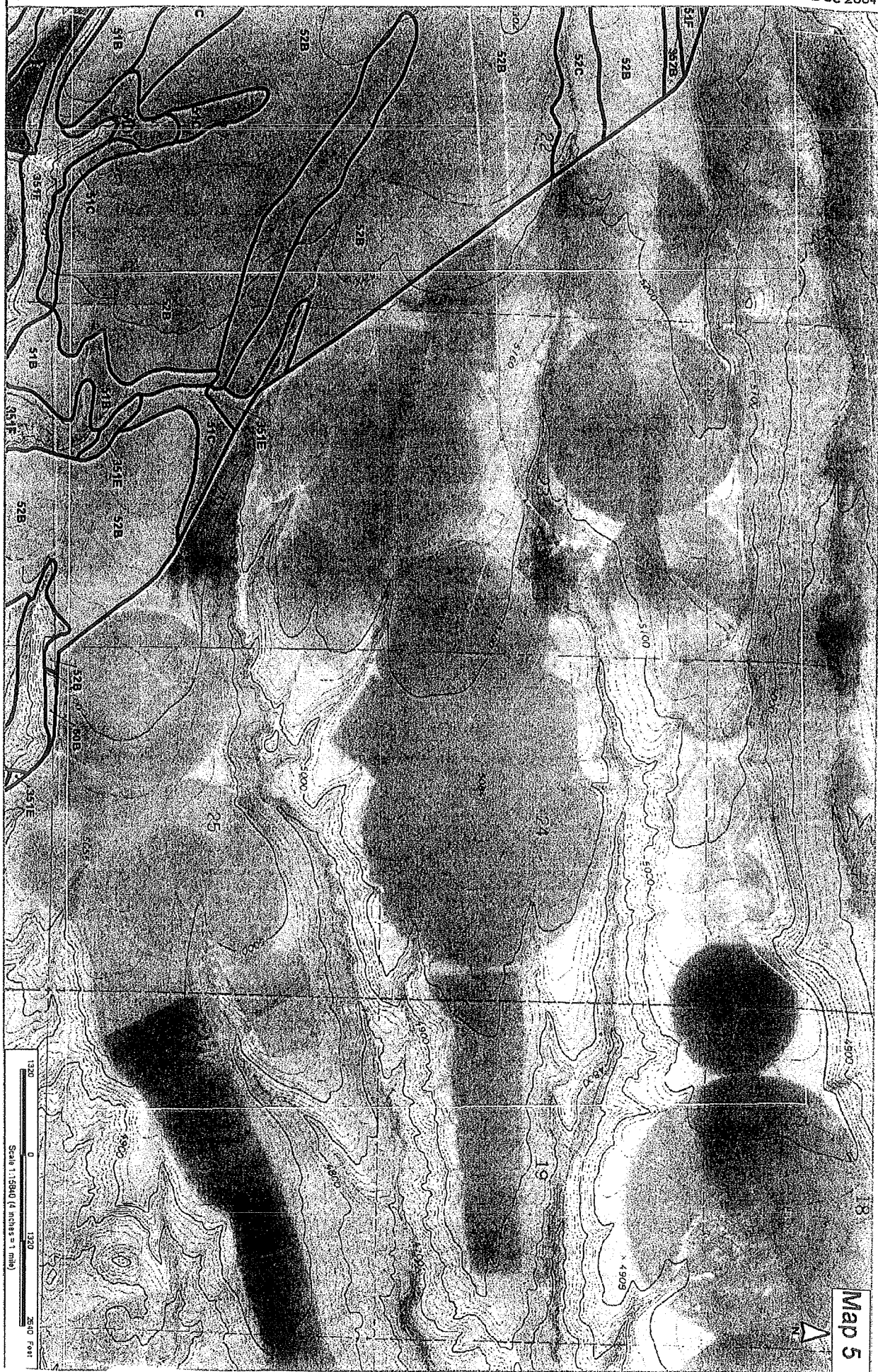






# Montana State Prison Ranch

Dec 2004





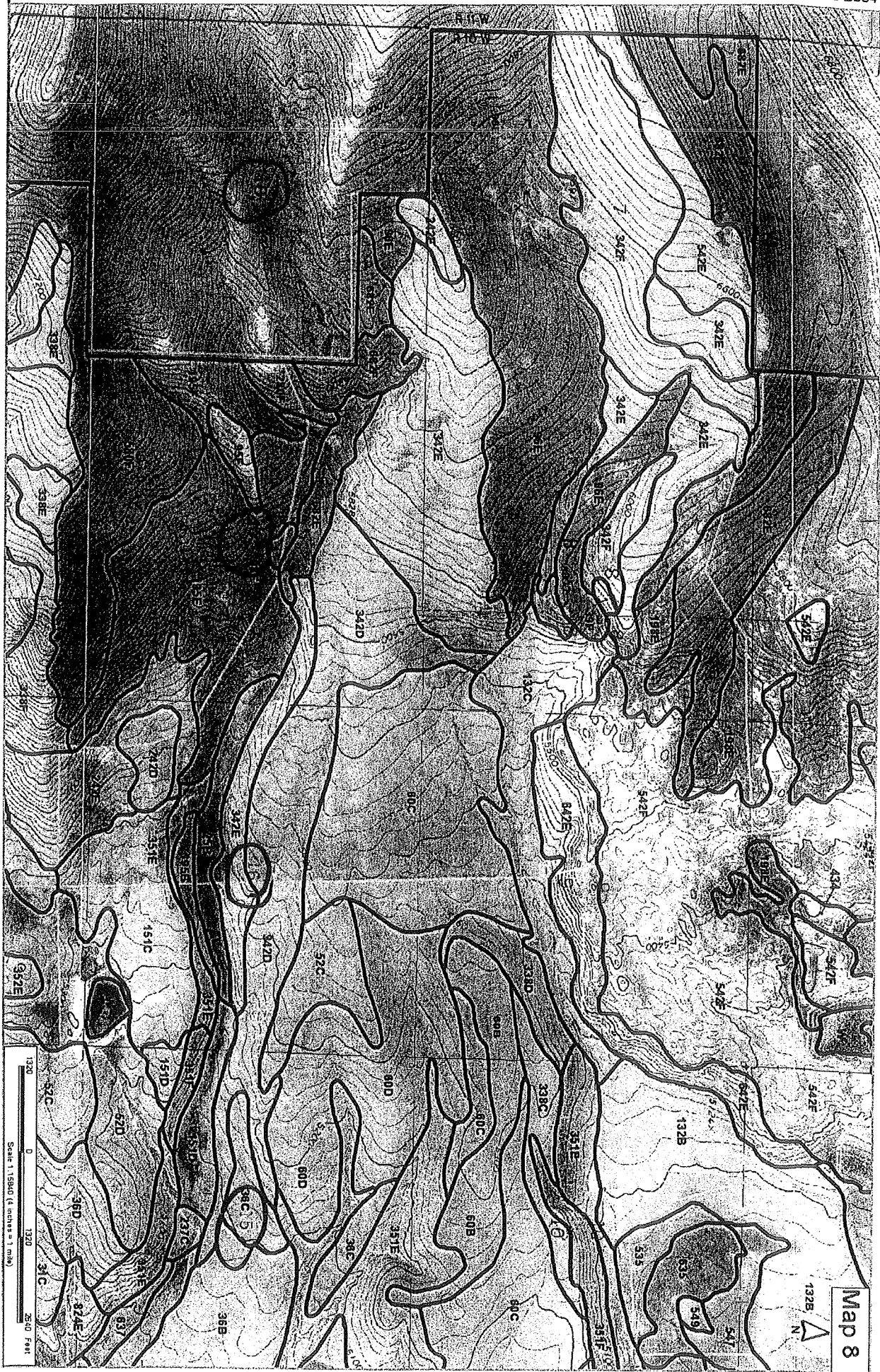






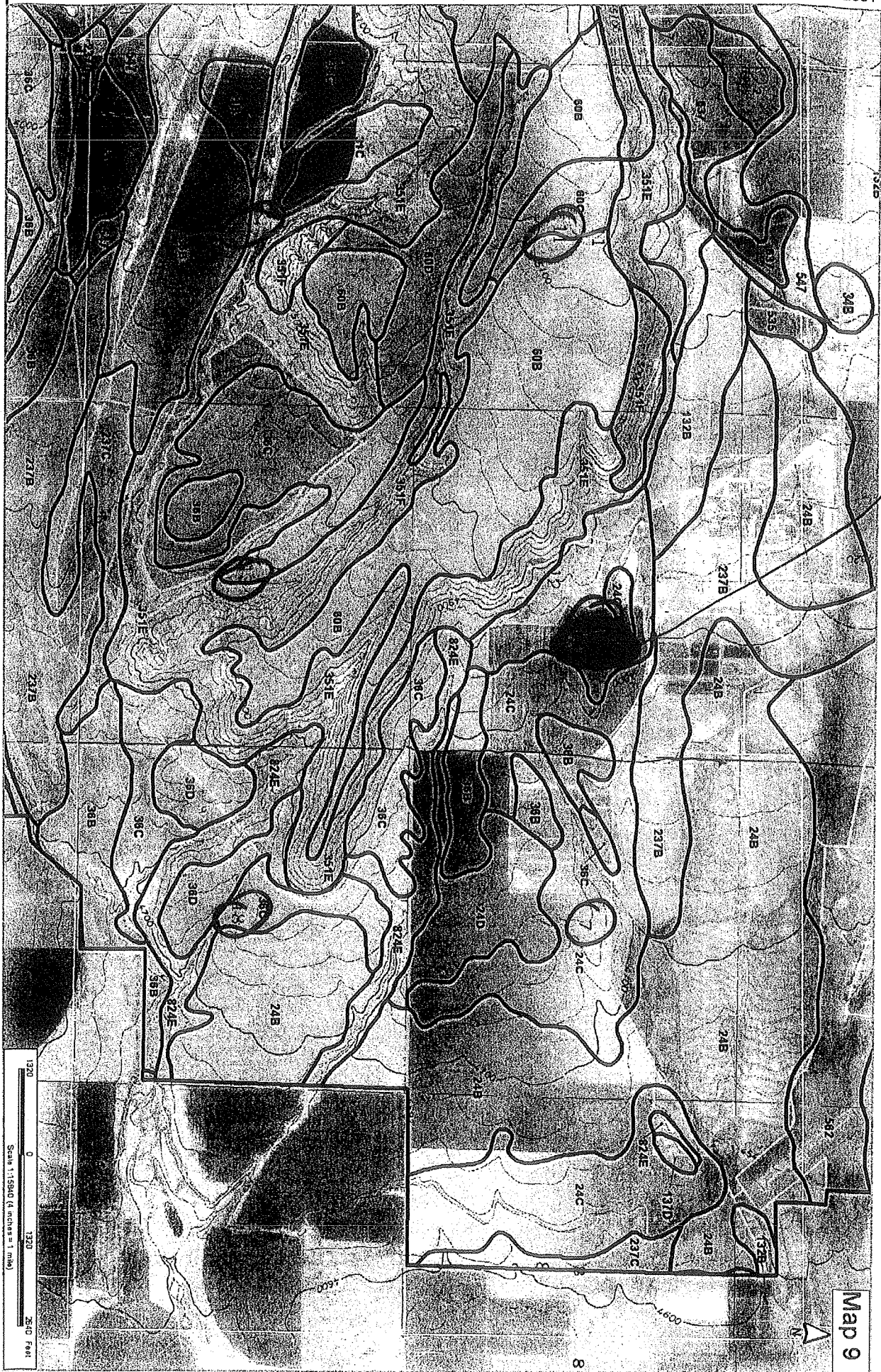
# Montana State Prison Ranch

Dec 2004

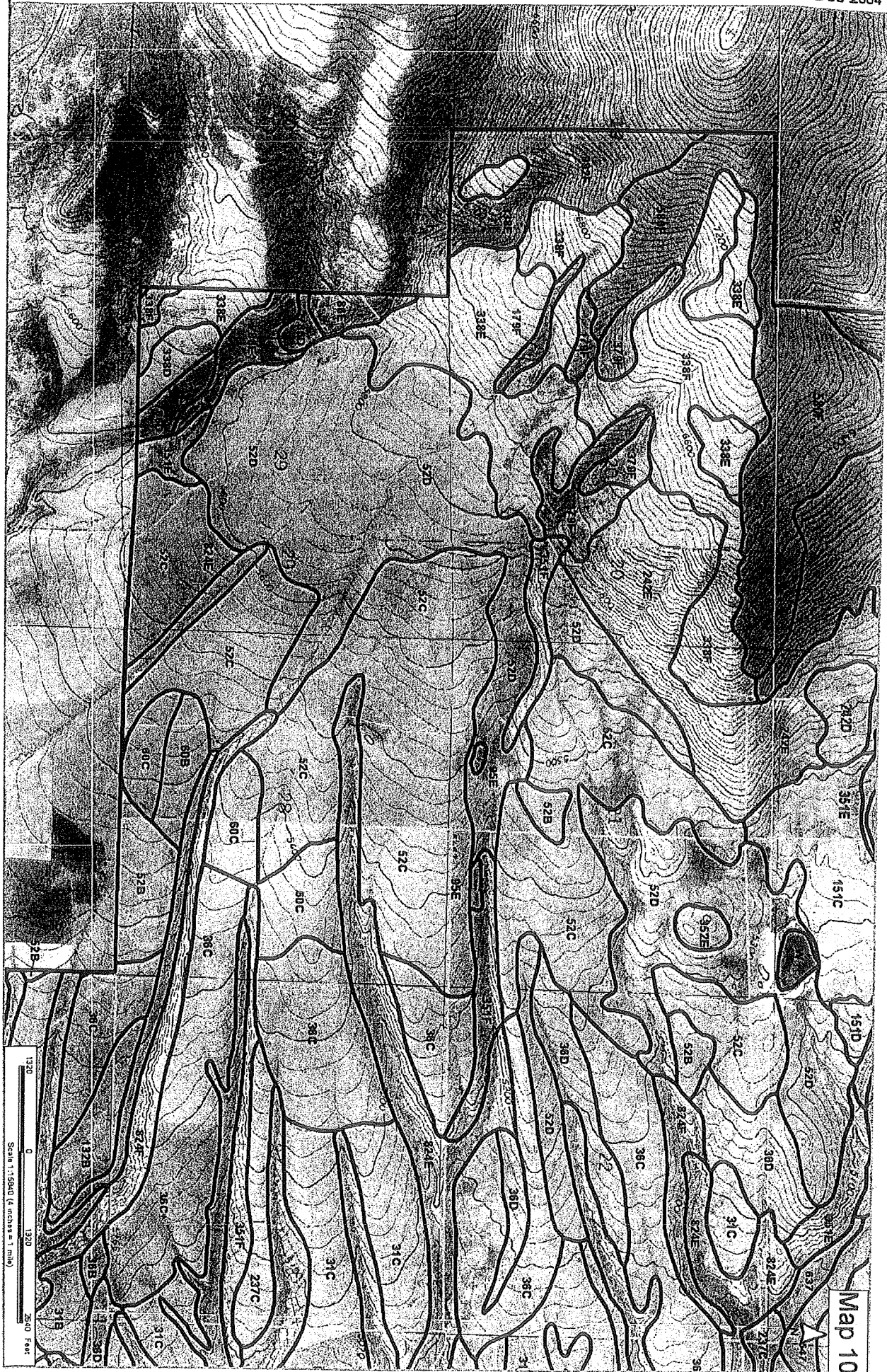


# Montana State Prison Ranch

Dec 2004





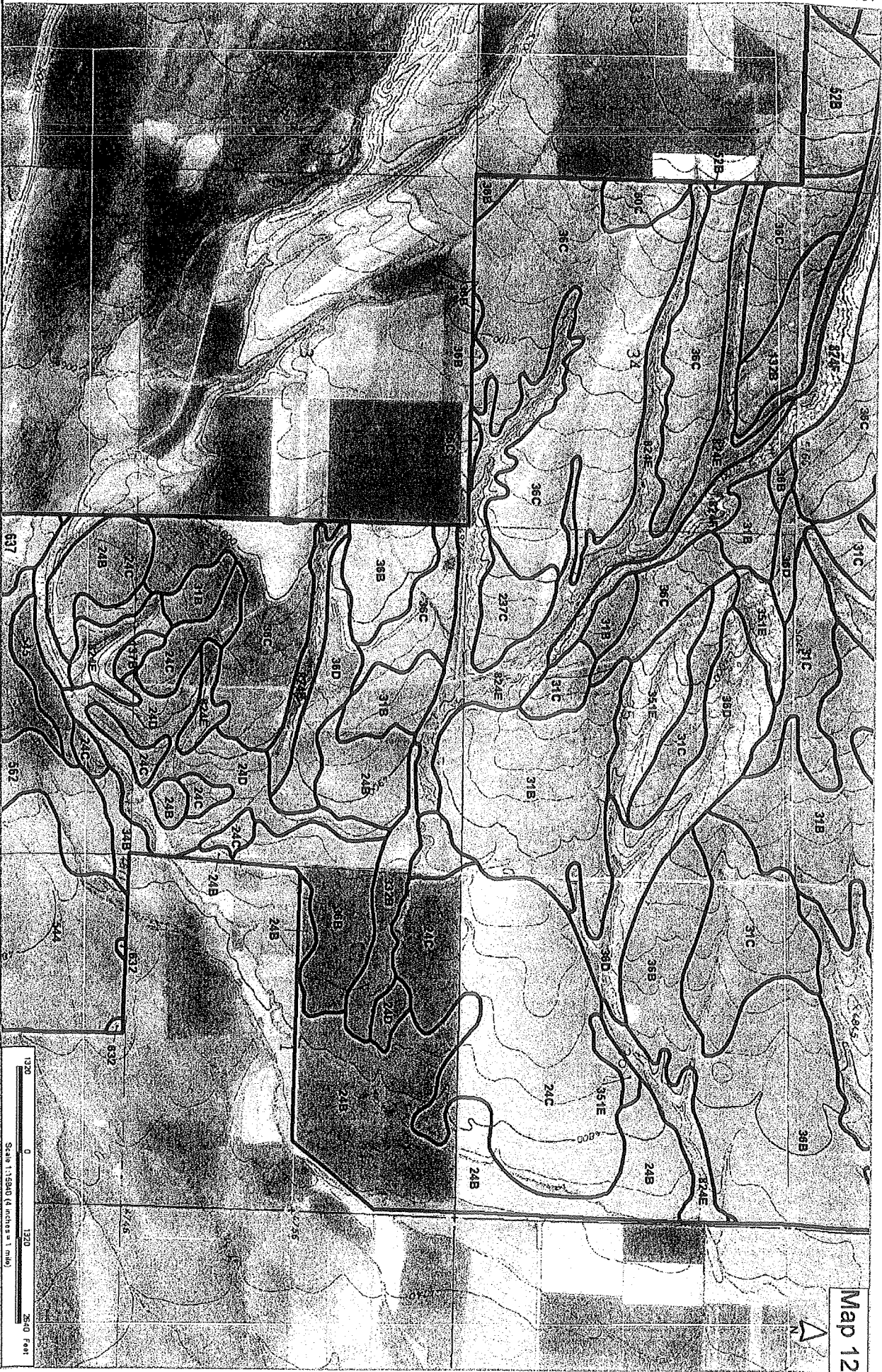






# Montana State Prison Ranch

Dec 2004



# Montana State Prison Ranch

Dec 2004

